31ST REGIONAL CONGRESS OF THE PERINATAL SOCIETY OF MALAYSIA

THEME:

The Arts & Science of Perinatal Health: Challenges, Strategies & Solutions

19TH-22ND JUNE 2025

Double Tree by Hilton, Shah Alam I-City, Malaysia

www.perinatalmalaysiacongress.com

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31ST PSM CONGRESS SCIENTIFIC COMMITTEE

Chairperson	:	Assoc Prof Dr. Azanna Abdul Kamar
Co-Chairperson	:	Prof Dr. Jamiyah Hassan
Secretary	:	Dr. Nadzratulaiman Wan Nordin
Assistant. Secretary	:	Dr. Fathi Ramly
Abstracts for Free Papers	:	Dr. Chye Joon Kin Dr. Zurina Zainudin Prof. Dr Zaleha Abdullah Mahdy Matron Santhi Verasingam
Committee Members	:	Prof. Emeritus Dr Boo Nem Yun Prof Dr. Cheah Fook Choe Assoc Prof Dr. Neoh Siew Hong Prof Dr Zaleha Abdullah Mahdy

PATRON OF THE PERINATAL SOCIETY MALAYSIA

Y.T.M. Raja Dato' Seri Eleena binti Almarhum Sultan Azlan Muhibbuddin Shah Al-Maghfur-lah

WELCOME ADDRESS

-The Organising Chairman/PSM President

Distinguished guests, esteemed colleagues, and dear friends,
It is with great honour and excitement that we welcome you to the 31st Perinatal Society of Malaysia Annual Congress here at DoubleTree by Hilton, Shah Alam. Over the next four days, we gather under the inspiring theme, "The Arts and Science of Perinatal Medicine," celebrating both the empirical advancements and the deeply human aspects of maternal and neonatal care.

This congress stands as a beacon of collaboration, with world renowned international faculties and leading experts from our local researchers, and healthcare professionals coming together to share insights, innovations, and best practices that continue to shape the future of perinatal medicine. From groundbreaking research to compassionate care, we embrace both the science that drives our knowledge and the art that defines our touch.

As we embark on this journey of learning, discussion, and discovery, let us also take the opportunity to build lasting connections and strengthen our commitment to improving perinatal health outcomes in the country and globally. Your presence here signifies the dedication and passion that fuel progress in this field, and we are honoured to have you here.
So, get ready for an enriching and inspiring experience—let's dive into engaging discussions, celebrate the achievements in our field, and pave the way for even greater strides in perinatal health.

Once again, on behalf of the council and organising committee, a warm welcome to the 31st Perinatal Society of Malaysia Annual Congress—may it be an enriching and inspiring experience for all.
Thank you, and let the congress begin!

Prof Dr Jamiyah Hassan
Organising Chairperson
31st Regional Annual Congress of the Perinatal Society of Malaysia
President of the Perinatal Society of Malaysia 2024/2025

WELCOME MESSAGE

- The Scientific Committee Chairperson

Dear distinguished colleagues, esteemed faculty, and fellow practitioners,

There is an art behind every clinical decision we make, where scientific rigour will not be obtained if we ignore the wisdom of clinical artistry. Its integration is delicate, yet important to ensure that though robust scientific knowledge underlies our efforts to save the lives of mothers and newborns via the integration of compassionate, ethical, and holistic care.

It is with this passion that I welcome all of you to our 31st Regional Congress of the Perinatal Society of Malaysia at the DoubleTree by Hilton Shah Alam i-City, Selangor. When the theme of *"The Art & Science of Perinatal Health – Challenges, Strategies and Solutions"* was mooted and chosen, our scientific committee were unanimous that as health care providers in the field of perinatology, we have an urgent need to ensure that those in the field truly understand this delicate balance, especially with today's technological advancements. We, therefore, earnestly hope that you will learn tremendously during these 4 days – of the art to translate complex research findings into life-saving decisions at the bedside of mothers and vulnerable newborns. To learn that every intervention we make, every protocol we follow, and every moment of care we provide, actually represents a seamless fusion of cutting-edge perinatal science, which must be integrated with an intuitive understanding of our own vulnerability and resilience.

Over the next four days, we will explore how this art manifests in our daily practice. Our invited faculty are some of the top experts of their field. They come from all over the world to deliver the most pertinent scientific content. Our workshops on "TeamSTEPPS", "Comprehensive Care for Tiny Babies", and "First-Trimester Ultrasound" demonstrate that excellence in perinatology requires not just individual expertise, but the art of collaborative practice. At this congress, via the delivery of 4 plenary lectures, 14 symposia, 3 workshops, more than 40 learning sessions, and the abstracts that we received from our delegates, we truly hope to demonstrate that perinatology extends far beyond the acute management of perinatal emergencies. From the precision required in managing periviable gestation to the nuanced approach needed for comprehensive care of extremely low birth weight infants, we will witness how evidence-based medicine becomes artful practice when applied with great skills, astute judgment, and ethical consideration.

As our distinguished international and regional faculty guide us through the latest advances, the true art of our practice lies in understanding the autonomy of the voices of those at stake, holding

on to the sacred trust of the families we serve, of “primum non nocere”, beneficence, and justice. The art and wisdom of when to intervene, when to exercise restraint, when to pursue aggressive treatment and when to focus on comfort and dignity. The art lies in discerning which innovations truly serve our patients,

and which may inadvertently create new forms of harm or inequality. I hope that each of you will leave this congress not just with an updated knowledge and refined techniques, but with a renewed appreciation for the artistry, inherent in evidence-based perinatology.
May our learning journey over these four days inspire us all to elevate the art and science of perinatal care to new heights.

Bunga seroja mekar di kolam taman,
Segar terapung menenangkan jiwa,
Seni dan sains dalam genggaman,
Demi menyelamatkan ibu, dan bayi bersama.

Enjoy the congress!

Assoc Prof Dr. Azanna Abdul Kamar
Scientific Committee Chairperson
31st Regional Annual Congress of the Perinatal Society of Malaysia
President Elect of the Perinatal Society of Malaysia 2024/2025.

Congress International Faculty

Adrienne Gordon
Professor
Senior Staff Specialist
Neonatologist,
Royal Prince Alfred
Hospital,
Sydney, Australia

Henrich Wolfgang
Professor
Director of the
Department of Obstetrics
and Gynecology,
Head of Ultrasound,
Charite-University
Medical Center,
Berlin, Germany

Kartika Darma Handayani
Consultant
Neonatologist,
Dr. Soetomo Regional
General Hospital,
Surabaya, Indonesia

Piya Chaemsaithong
Associate Professor
Department of Obstetrics
and Gynaecology,
Faculty of Medicine
Ramathibodi Hospital,
Bangkok, Thailand

Quek Bin Huey
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Adj Asst Prof, DUKE-NUS
Medical School
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Head, Neonatal Intensive
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Singapore

Rajammal Kaliappan
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Roy Joseph
Professor Emeritus,
Chair of Paediatric Ethics
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Singapore, Singapore

Savitree Pranpanus
Associate Professor
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Service,
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& Gynaecology,
Prince of Songkhla
University,
Hatyai, Thailand

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Physiotherapy Department
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Tetsuya Isayama
Senior Consultant Neonatologist,
Head of Division of Neonatology,
National Center for Child Health and Development (NCCHD)
Tokyo
Japan

Yvonne Ng Peng Mei
Adjunct Assoc. Professor,
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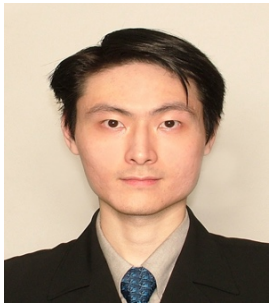
National University of Singapore,Singapore

Congress Local Faculty

Agnes Tan Sun Mee
Paediatrician and Neonatologist,
Hospital Sg Buloh,
Sg Buloh, Selangor



Albert Tan Chao Chiet
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Consultant Paediatrician & Neonatologist,
Head, Department of Paediatrics,
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Boo Nem Yun
Emeritus Professor of Paediatrics and Neonatology,
M. Kandiah Faculty of Medicine and Health Sciences
Universiti Tunku Abdul Rahman,
Bandar Sg Long, Kajang, Selangor

Carol Lim
Consultant in Fetal-Maternal Medicine, Obstetrics and Gynaecology,
Former Head of Service for OBGYN Selangor, Ministry of Health

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Professor of Paediatrics and Neonatology,
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Cheras, Kuala Lumpur

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Universiti Malaya, Lembah Pantai, Kuala Lumpur

Eric Ang Boon Kuang
Consultant Paediatrcian and Neonatologist,
Hospital Sultanah Bahiyah, Alor Setar, Kedah

Congress Local Faculty (cont'd)

Fathi Ramly
Senior Lecturer and MFM Trainee,
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Lilian Ngo Ping Ling
Paediatrician and Neonatologist,
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Nadzratulaiman Wan Nordin
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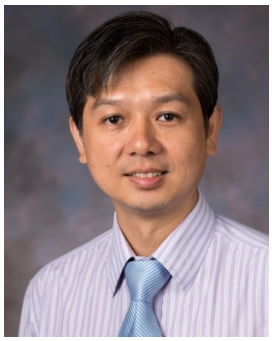
Nurain Mohd Noor
Consultant Endocrinologist & Head,
Clinical Research Centre,
Hospital Putrajaya

Nurul Huda Sulaiman
Specialised Nurse,
Neonatal Intensive Care Unit (NICU)
Department of Paediatrics,
University Malaya Medical Centre (UMMC),
Lembah Pantai, Kuala Lumpur

Quek Yek Song
Consultant Obstetrician & Gynecologist,
Columbia Asia Hospital - Iskandar Puteri,
Johor Bahru, Johor

Congress Local Faculty (cont'd)



Tan Geok Chin
Professor of Pathology,
Faculty of Medicine,
Universiti Kebangsaan Malaysia,
Hospital Canselor Tuanku Muhriz UKM Cheras, Kuala Lumpur

Thong Meow Keong
Honorary Professor & Consultant Paediatric Geneticist,
Faculty of Medicine,
Universiti Malaya, Kuala Lumpur
Dean, M.Kandiah Faculty of Medicine and Health Sciences,
Universiti Tunku Abdul Rahman,
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Voon Hian Yan
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Adjunct Lecturer,
University Malaysia Sarawak,
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Wong Ann Cheng
Consultant Paediatrician and Neonatologist,
Hospital Miri,
Sarawak

Wong Chee Sing
Consultant Paediatrician and Neonatologist,
Sunway Medical Centre Ipoh,
Ipoh, Perak

Zaleha Abdullah Mahdy
Retired Professor and Senior Consultant in Obstetrics & Gynaecology,
Faculty of Medicine,
Universiti Kebangsaan Malaysia,
Hospital Canselor Tuanku Muhriz UKM
Cheras, Kuala Lumpur

PERINATAL SOCIETY OF MALAYSIA (PSM) PRESIDENTS

Year	Name of President
1994/1995	Emeritus Prof Dr. Boo Nem Yun
1995/1996	Dr. Gunasegaran PT Rajan
1996/1997	The late Dato' Dr. Lim Nyok Ling
1997/1998	Dr. Gunasegaran PT Rajan
1998/1999	Datuk Dr. Musa Nordin
1999/2000	Dr. Ravi Chandran M.
2000/2001	The late Dato' Dr. Lim Nyok Ling
2001/2002	Professor Dr. Jamiyah Hassan
2002/2003	Professor Dr. Lim Chin Theam
2003/2004	The late Dr. Japaraj Robert Peter
2004/2005	Dr. Irene Cheah Guat Sim
2005/2006	Dr. Kalavathy Subramaniam
2006/2007	the late Dato' Dr. Lim Nyok Ling
2007/2008	Dr. J. Ravichandran
2008/2009	Dr. Irene Cheah Guat Sim
2009/2010	Dr. T.P. Baskaran
2010/2011	Dr Alvin Chang Shang Ming
2011/2012	Dr Rosy Jawan
2012/2013	Datuk Dr. Soo Thian Lian
2013/2014	Dato' Dr. Bavanandan Naidu
2014/2015	Dr. See Kwee Ching
2015/2016	Dr. Sharmini Diana Parampalam
2016/2017	Assoc Prof Dr. Azanna Ahmad Kamar
2017/2018	Assoc Prof. Dato' Dr. Hamizah Ismail
2018/2019	Datuk Dr. Soo Thian Lian
2019/2020	Professor Dr. Zaleha Binti Adbullah Mahdy
2020/2021	Professor Dr. Zaleha Binti Adbullah Mahdy
2021/2022	Dr. Irene Cheah Guat Sim
2022/2023	Dr. TP Baskaran
2023/2024	Dr. Neoh Siew Hong
2024/2025	Prof Dr. Jamiyah Hassan

WORKSHOP 1
Comprehensive Care For Tiny Babies Workshop
Thursday, 19 June 2025
Doubletree By Hilton Shah Alam I-City, Shah Alam, Selangor, Malaysia

Time	WORKSHOP DETAILS	
0800 - 0830	**WORKSHOP REGISTRATION W1: Comprehensive Care for Tiny Babies**	
	ESSENTIALS OF THE GOLDEN HOUR	
0815 - 0830	**Welcome to the "Comprehensive Care for Tiny Babies" Workshop**	AZANNA AHMAD KAMAR
0830 - 0915	**W1a:** How to Optimise the Golden Hour for the Tiny Baby - An Overview	QUEK BIN HUEY
0915 - 0945	**W1b:** The First Barrier - Thermoregulation & Skin Care from the 1st Minute to Beyond	YVONNE NG
0945 - 1015	**W1c:** The Dilemma of Fluid Requirement in Tiny Babies - A Comparison of Guidelines	AZANNA AHMAD KAMAR
1015 - 1045	**W1d:** Strategies for Lung Recruitment and Rescue at Birth in ELBW infants	WONG ANN CHENG
1045 - 1115	**BREAK**	
1115 - 1145	**W1e:** Transporting the ELBW Infant - Problems & Troubleshooting	ERIC ANG
1145 - 1305	**THE GOLDEN HOUR `HANDS-ON'** **(4 Groups - swap every 20 mins)**	
1145 - 1205	**Station 1:** The First Barrier - Thermoregulation, Humidity & Skin Care	YVONNE NG PENG MEI SANTHI VERASINGAM
1205 - 1225	**Station 2:** Neurodevelopmental Care & Positioning for ELBW Infants	SHELLY ANNE SHERWOOD
1225 - 1245	**Station 3:** Lung recruitment *- Early CPAP (enCPAP) for ELBW during resuscitation*	WONG ANN CHENG/ AZANNA A KAMAR
1245- 1305	**Station 4:** Transporting the ELBW Neonate *- Initial settings and the set-up of transport incubator & ventilator*	ERIC ANG/ LILIAN NGO
1305 - 1400	**LUNCH**	
1400 - 1530	**MONITORING & STABILISING THE ELBW**	
1400 - 1430	**W1f:** Nomograms and Red Flags for ELBWs: Making Sense of Vital Signs to Guide Decisions	AGNES TAN SUN MEE
1430 - 1500	**W1g:** Point of Care Ultrasound to Improve Outcomes of VLBW Infants - The Japanese Approach	TETSUYA ISAYAMA
1500 - 1530	**W1h:** Securing, and Care of PIVs and Central Catheter Access for Nutrition & Vasoactive Agents in ELBWs	LILIAN NGO
1530 - 1550	**TEA BREAK**	

1550 - 1710	**MONITORING & STABILISING THE ELBW `HANDS - ON' (4 Groups - swap every 20 mins)**	
1550 - 1610	**Station 1:** PICC Insertion & Care of the PICC Line	LILIAN NGO SANTHI VERASINGAM
1610 - 1630	**Station 2:** Using Ultrasound to Guide Central Line Insertion	WONG CHEE SING
1630 - 1650	**Station 3:** The Japanese Approach for Ultrasound in ELBW Infants	TETSUYA ISAYAMA
1650 - 1710	**Station 4:** Monitoring of ELBW status using vital signs and ultrasound	AGNES TAN SUN MEE
1710 - 1730	**DISCUSSION & CONCLUSION**	
	END OF W1	

Workshop Faculty

Dr. Tetsuya Isayama, Assoc Prof Dr. Azanna Ahmad Kamar, Dr. Quek Bin Huey, Dr. Eric Ang Boon Kuang, Ms. Rajammal Palaniappan Kaliappan, Dr. Wong Ann Cheng, Assoc Prof Dr. Yvonne Ng Peng Mei, Dr. Wong Chee Sing, Ms. Shelly Anne Sherwood, Dr. Agnes Tan Sun Mee, Ms. Santhi Verasingam, Dr. Lilian Ngo Ping Ling

In collaboration with:

Daya Cergas (M) Sdn Bhd
Draeger Malaysia Sdn Bhd
Fritz Stephan Southeast Asia Sdn Bhd
Mediwide Sdn Bhd
Toyo Adtec Sdn Bhd

WORKSHOP 2
Strategies and Tools to Enhance Performance and Patient Safety (STEPPS) Training in Obstetric Care
Thursday, 19 June 2025
Doubletree By Hilton Shah Alam I-City, Shah Alam, Selangor, Malaysia

TIME	ACTIVITY
0830-0845	Pre-Test
0845-0900	Briefing and Ice Breaking
0900-0930	Learning Objectives and Introduction to TeamSTEPPS®
0930-0945	Coffee Break
0945-1030	Communication
1030-1100	Team Leadership
1100-1130	Situation Monitoring
1130-1200	Mutual Support
1200-1215	Debriefing / Take Home Messages
1215-1230	Post-test and Closure

Workshop Faculty
Prof Dr. Zaleha Abdullah Mahdy

WORKSHOP 3
1st Trimester Ultrasound Workshop

Thursday, 19 June 2025
Doubletree By Hilton Shah Alam I-City, Shah Alam, Selangor, Malaysia

Time	WORKSHOP DETAILS	
1300-1730	**WORKSHOP REGISTRATION W3: Ultrasound in the First Trimester**	
1300-1320	**W3a:** 11-14 Ultrasound scanning- ISUOG Guidelines	VOON HIAN YAN
0915-0945	**W3b:** Nuchal Translucency & Ductus	NADZRATULAIMAN WAN NORDIN
1320-1340	**W3c:** Pre-eclampsia Screening in 1st Trimester	FATHI RAMLY
1015-1045	**W3d:** 1st Trimester Fetal Abnormalities	JAMIYAH HASSAN
1440-1500	**BREAK**	
1500-1730	**HANDS-ON ULTRASOUND IN THE FIRST TRIMESTER (4 Groups)**	
1500-1730	**Hands-On Station Activities** • **Crown-Rump Length (CRL)** • **Nuchal Translucency** • **Fetal Heart Rate** • **Ductus** • **Uterine Artery** • **1st Trimester Anomaly Scan**	ALL FACULTY
1715-1730	**DISCUSSION & CONCLUSION**	ALL FACULTY
1730	**END OF W3**	

Workshop Faculty
Prof Dr Jamiyah Hassan, Dr Voon Hian Yan, Dr Nadzratulaiman Wan Nordin, Dr Fathi Ramly

In Collaboration

INFINITY
MEDICAL

Congress Scientific Programme Day 1

Time / Date	CONGRESS DAY 1 Friday 20th June 2025	
0730 - 0815	REGISTRATION MORNING COFFEE	
0815 - 0900	GRAND BALLROOM P1. FAOPS PLENARY LECTURE CHAIRPERSON: NEOH SIEW HONG **Reducing Stillbirths and Neonatal Deaths – The Way Forward** ADRIENNE GORDON *Australia*	
0900 - 1040	GRAND BALLROOM SYMPOSIUM 1 PERINATAL MORTALITY & MORBIDITY CHAIRPERSON: ERIC ANG	CENTRAL WALK SYMPOSIUM 2 PRETERM BIRTH & THE SMALL FETUS CHAIRPERSON: FATHI RAMLY
0900 - 0930	**S1A.** Small Babies, Big Risk: Reducing Morbidities in Babies Born SGA ADRIENNNE GORDON *Australia*	**S2A.** Challenges in Prevention PIYA CHAEMSAITHONG *Thailand*
0930 - 1000	**S1B.** The Perinatal "Autopsy" – Lessons Learned TAN GEOK CHIN	**S2B.** Preterm Births: Management Options JAMIYAH HASSAN
1000 - 1030	**S1C.** Medicolegal Aspects of Perinatal Loss KULENTHERAN ARUMUGAM	**S2C.** Doppler Assessment in Fetal Growth Restriction VOON HIAN YAN
1030 – 1040	Q&A	Q&A
1040 - 1100	TEA BREAK	

Congress Scientific Programme Day 1 (Cont'd)

1100 — 1245	GRAND BALLROOM **OPENING CEREMONY** *Graced By* **THE HONOURABLE PSM PATRON** **YTM RAJA DATO' SERI ELEENA ALMARHUM SULTAN AZLAN SHAH** ****** BALLROOM A **EXHIBITION BOOTHS VISIT** **AND** CENTRAL WALK **POSTER PRESENTATION SESSION**
1245 — 1415	GRAND BALLROOM **LUNCH SYMPOSIUM A** **PROTECTING OUR LITTLE ONES THROUGH MATERNAL IMMUNIZATION: THE FIGHT AGAINST RSV IN INFANTS** **CHAIR: JAMIYAH HASSAN** LB1: The Impact of RSV: Understanding the Disease Burden in Infants **LIEW ZHE YI** LB2: Latest clinical and real-world evidence on RSV prevention in infants through maternal immunization **RAMAN SUBRAMANIAN**
1415 — 1500	GRAND BALLROOM P2. OBSTETRICS PLENARY LECTURE CHAIRPERSON: JAMIYAH HASSAN **Chitosan Tamponade: The Game Changer in The Treatment of Postpartum Haemorrhage** HENRICH WOLFGANG *Germany*

Congress Scientific Programme Day 1 (Cont'd)

1500 - 1645	GRAND BALLROOM **SYMPOSIUM 3** **HOW TO USE PRECISION CARE – THE FUTURE** CHAIRPERSON: CHEONG SHU MENG	CENTRAL WALK **SYMPOSIUM 4** **DIABETES IN PREGNANCY** CHAIRPERSON: NADZRATULAIMAN W NORDIN
1500 – 1530	**S3A.** Clinical Utility of Perinatal Genomics – Examples from Cases THONG MEOW KEONG	**S4A.** Peripartum Considerations for GDM and Diabetic Pregnancies TAN LAY KOK *Singapore*
1530 - 1600	**S3B.** Use of Metabolomics in Neonatal Nutrition – Examples from Cases CHEAH FOOK CHOE	**S4B.** Use of Metformin in Pregnancy FATHI RAMLY
1600 – 1630	**S3C.** Artificial Intelligence in Perinatology – The Way Forward QUEK YEK SONG	**S4C.** Continuous Sugar Monitoring – Is it Better? NURAIN MOHD NOOR
1630 - 1645	**Q&A**	**Q&A**
1645	**AFTERNOON TEA** **END DAY 1**	
1700 - 1800	MEETING ROOM **32nd PSM ANNUAL GENERAL MEETING**	

Congress Scientific Programme Day 2

Time / Date	CONGRESS DAY 2 Saturday 21st June 2025	
0730 - 0815	REGISTRATION MORNING COFFEE	
0815 - 0900	GRAND BALLROOM P3. THE LATE DATO' DR. LIM NYOK LING MEMORIAL LECTURE CHAIRPERSON: AZANNA A KAMAR **Management & Outcomes of Periviable Births - Japanese Experience & the i/AsianNEO Collaboration** TETSUYA ISAYAMA *Japan*	
0900 - 1040	GRAND BALLROOM SYMPOSIUM 5 THE TINY BABIES CHAIRPERSON: IRENE CHEAH GUAT SIM	CENTRAL WALK SYMPOSIUM 6 HYPERTENSIVE DISORDERS IN PREGNANCY CHAIRPERSON: VOON HIAN YAN
0900 - 0930	**S5A.** Preterm Births <32 Weeks in Malaysia – Lessons Learned from the MNNR BOO NEM YUN	**S6A.** First Trimester Prediction & Prevention of Pre-Eclampsia PIYA CHAEMSAITHONG *Thailand*
0930 - 1000	**S5B.** Management of MicroPreemies – Experience Sharing & Evidence-Based Framework YVONNE NG *Singapore*	**S6B.** Aspirin & the Placenta JAMIYAH HASSAN
1000 - 1030	**S5C.** Guaranteeing Haemodynamic Stability of ELBW Neonates AGNES TAN SUN MEE	**S6C.** Maximising Pharmacotherapy TAN LAY KOK *Singapore*
1030 – 1040	Q&A	Q&A
1040 -1100	TEA BREAK	

Congress Scientific Programme Day 2 (Cont'd)

1100 - 1245	GRAND BALLROOM **SYMPOSIUM 7** **FAMILY-INTEGRATED & FOLLOW-UP CARE** CHAIRPERSON: NEOH SIEW HONG	CENTRAL WALK **SYMPOSIUM 8** **MODELS OF PATIENT & FAMILY-CENTRED CARE** CHAIRPERSON: LIM SENG KEAT
1100 – 1130	**S7A.** How to Initiate & Sustain Family Integrated Care (Fi Care) RAJAMMAL KALIAPPAN *Singapore*	**S8A.** Overview of Family Centred Care NADZRATULAIMAN WAN NORDIN
1130 - 1200	**S7B.** Post-Discharge Follow-Up for High-Risk Infants QUEK BIN HUEY *Singapore*	**S8B.** Models of Perinatal Care in the Community CAROL LIM KK
1200 - 1230	**S7C.** Bereavement Counselling Post-Perinatal Loss: How Should This Be Done? ADRIENNE GORDON *Australia*	**S8C.** The ECHO Model of Patient-Centred Care in Perinatology ZALEHA MAHDY
1230 – 1245	**Q&A**	**Q&A**
1245 – 1415	GRAND BALLROOM **LUNCH SYMPOSIUM B** **CHAIR: AZANNA AHMAD KAMAR** LB1: Redefining RSV Prevention – Clinical Insights into Nirsevimab **MUSA MOHD NORDIN** LB2: How Can We Protect All Infants in Our Practice Against RSV? **CHEAH FOOK CHOE**	

Congress Scientific Programme Day 2(Cont'd)

1415 - 1600	GRAND BALLROOM **SYMPOSIUM 9** **SEPSIS IN NEWBORNS** CHAIRPERSON: AZANNA AHMAD KAMAR	CENTRAL WALK **SYMPOSIUM 10** **THE DELIVERY SUITE** CHAIRPERSON: CAROL LIM KK
1415 – 1445	**S9A.** Understanding the Root Cause - Pathology of Fetal Inflammatory Response Syndrome (FIRS) TAN GEOK CHIN	**S10A.** SOFIE: Sonography Only and Few Internal Examinations for Normal Delivery HENRICH WOLFGANG *Germany*
1445 – 1515	**S9B.** Evidence-Based Approach to Management of Septicaemic Shock WONG ANN CHENG	**S10B.** Baby Born Flat CHOO YAO MUN
1515 – 1545	**S9C.** Step-by Step Haemodynamics for Assessment & Monitoring of the Septic Baby WONG CHEE SING	**S10C.** 3rd & 4th Degree Tears – How to Manage ALBERT TAN
1545 - 1600	**Q&A**	**Q&A**
1600 – 1715	CENTRAL WALK **ABSTRACT PRESENTATION** **- NEONATAL/ OBSTETRICS/ NURSING**	
1715	**AFTERNOON TEA** **END DAY 2**	
1945 - 2230	GRAND BALLROOM **31ST PSM CONGRESS GALA DINNER**	

Congress Scientific Programme Day 3

Time / Date	CONGRESS DAY 3 Sunday 22nd June 2025	
0730 - 0815	REGISTRATION MORNING COFFEE	
0815 - 0900	GRAND BALLROOM P4. OBSTETRICS PLENARY LECTURE CHAIRPERSON: ZALEHA MAHDY **Cardiac Diseases in Pregnancy – A Perinatal Perspective** TAN LAY KOK *Singapore*	
0900 - 1040	GRAND BALLROOM SYMPOSIUM 11 EMERGENCIES & STABILISING THE NEONATE CHAIRPERSON: WONG ANN CHENG	CENTRAL WALK SYMPOSIUM 12 OBSTETRIC EMERGENCIES CHAIRPERSON: JAMIYAH HASSAN
0900 - 0930	**S11A.** The Bleeding Infant – Approach to Coagulopathy LILIAN NGO	**S12A.** Enhancing Antenatal Diagnosis of Placenta Accreta Spectrum (PAS): Optimizing Diagnosis and Improving Outcomes SAVITREE PRANPANUS *Thailand*
0930 - 1000	**S11B.** Intrapartum Suctioning, Ventilation Strategies & Controversies in the Management of Meconium Aspiration Syndrome (MAS) ERIC ANG	**S12B.** Peripartum life-threatening diseases: amniotic fluid embolism and aortic dissection HENRICH WOLFGANG *Germany*
1000 - 1030	**S11C.** Tailor-Made Circulatory Management of Severe Persistent Pulmonary Hypertension of the Newborn (PPHN) TETSUYA ISAYAMA *Japan*	**S12C.** Treatment Options and Global Perspectives on Managing Placenta Accreta Spectrum SAVITREE PRANPANUS *Thailand*
1030 – 1040	Q&A	Q&A
1040 -1100	TEA BREAK	

Congress Scientific Programme Day 3 (Cont'd)

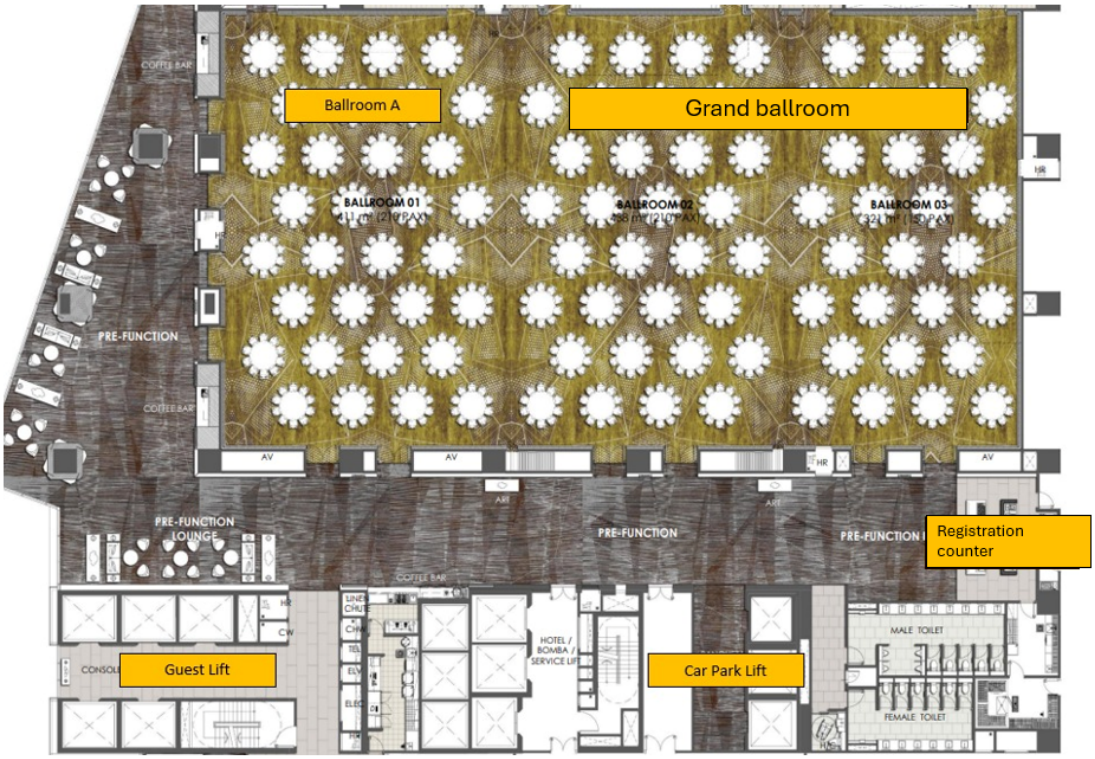
1100 - 1210	GRAND BALLROOM **SYMPOSIUM 13** **Immune Health & Nutrition** CHAIRPERSON: CHEAH FOOK CHOE	CENTRAL WALK **SYMPOSIUM 14** **Gynaecological Conditions in Obstetrics** CHAIRPERSON: ZALEHA MAHDY
1100 – 1130	**S13A.** Enhancing Immunity with Early Nutrition – Early Colostrum & Antenatally Expressed Breast Milk KARTIKA DARMA HANDAYANI *Indonesia*	**S14A.** Caesarean Scar Ectopic JAMIYAH HASSAN
1130 – 1200	**S13B.** Evidence-Based TPN Prescription: How Best to Determine Nutrition Requirements YVONNE NG *Singapore*	**S14B.** Ovarian Cyst in Pregnancy – Remove, Or Not? VOON HIAN YAN **S14C.** Value of Placental Examination – An Autopsy for Obstetricians PIYA CHAMESAITHONG *Thailand*
1200 - 1210	Q&A	Q&A
1210 - 1310	GRAND BALLROOM **FORUM** CHAIRPERSONS: AZANNA AHMAD KAMAR & JAMIYAH HASSAN **The Mother, Her Fetus & The Society: The Ethics of Saving Periviable Births (22 to <26 Weeks GA)** ROY JOSEPH, *Singapore* CAROL LIM KAR KOONG, *Malaysia* MANEET KAUR, *Malaysia*	
END OF CONGRESS		

Premium Sponsors

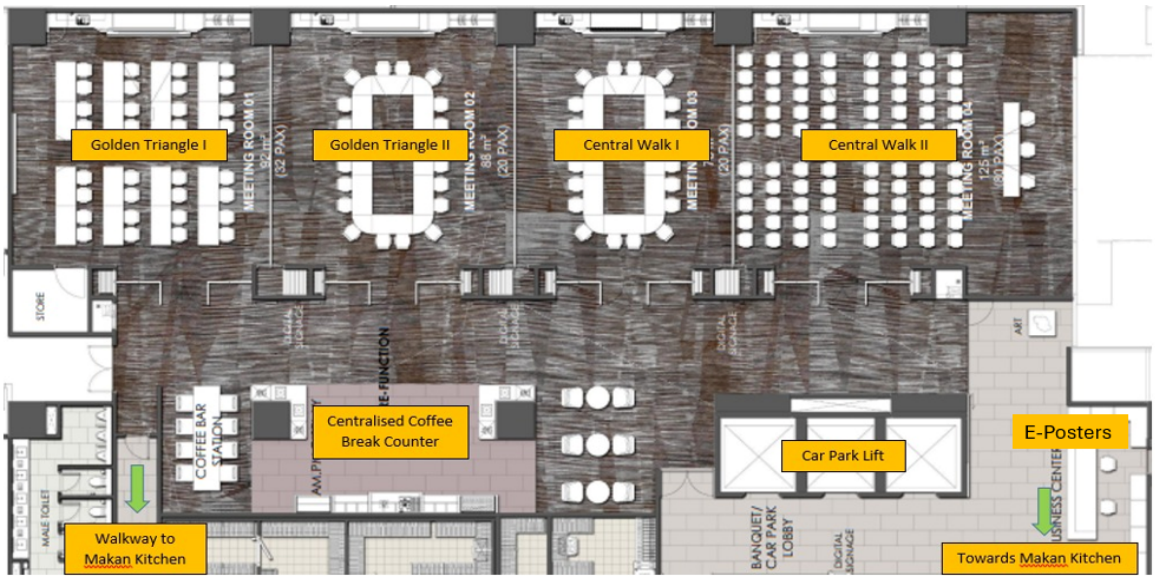
CONGRESS LAYOUT – *DoubleTree by Hilton Shah Alam i-City*

Ballrooms, Booths and Poster locations

Ballroom layout Level 2



Central Walk layout – Level 1



LOCATION OF BOOTHS

	Company	Booth No
1	4u-Tech Corporation Sdn Bhd	S20
2	AstraZeneca Sdn Bhd	P02
3	Danmedik sdn. Bhd.	S01
4	Daya Cergas (M) Sdn Bhd	S02
5	Daya Cergas (M) Sdn Bhd (S03)	S03
6	Draeger Malaysia Sdn Bhd	P04
7	Fresenius Kabi Malaysia Sdn Bhd	S07
8	Fritz Stephan Southeast Asia sdn. bhd.	S16
9	Gemilang Asia Technology Sdn Bhd	S09
10	Hospimetrix Sdn Bhd	S18
11	Infinity Medical Sdn. Bhd. (Mindray)	P03
12	Insan Bakti Sdn Bhd	S06
13	insan damai sdn bhd	P08
14	Kuberan Healthcare Sdn Bhd	P01
15	Mediwide Sdn. Bhd	S17
16	Parker Healthcare Sdn Bhd	S15
17	Pfizer (Malaysia) Sdn Bhd	P06
18	Pharm-D Sdn Bhd	P05
19	Remedic Services & Supplies Sdn Bhd	S13
20	Sanofi-Aventis (Malaysia) Sdn Bhd	P07
21	Schmidt BioMedTech Sdn Bhd	S11
22	Schmidt BioMedTech Sdn Bhd	S12
23	Surgymatrix (M) Sdn Bhd	S10
24	Suria Medik Sdn Bhd	S14
25	SY Medik Sdn Bhd	S05
26	Toyo Adtec Sdn Bhd	S19
27	Wellesta Health Sdn Bhd	S04

PLENARY LECTURE 1

FAOPS PLENARY LECTURE
20th June 2025, Friday
Chairperson: Neoh Siew Hong

P1: Reducing Stillbirths and Neonatal Deaths- The Way Forward
Adrienne Gordon

P1: Reducing Stillbirths and Neonatal Deaths- The Way Forward

Adrienne Gordon

Globally, a baby dies before or during birth every 16 seconds representing 2 million deaths annually. Stillbirth in late pregnancy (>28 weeks) are often considered the most preventable. The global burden of stillbirth and neonatal death is disproportionately shouldered by low and middle income countries however in high-income countries (HICs), up to 1 in 3 stillbirths remain preventable and equity gaps are significant and widening. Steady reductions in stillbirths of late gestation (28 weeks' gestation or more) and neonatal death have been observed, but these reductions differ between countries. These data represent the tip of the iceberg, with much of the preterm burden for mortality unknown globally. High income countries must do better to reduce inequities and they have a key role to play in generating data that can drive change and shape prevention strategies at the global level. Implementation science can offer solutions that equip us to tailor interventions to specific contexts, addressing challenges like resource limitations and cultural beliefs. The talk will focus on the Global Burden and the way forward for prevention of stillbirth and neonatal death, challenges and opportunities.

PLENARY LECTURE 2

PLENARY LECTURE 2

20th June 2025, Friday
Chairperson: Jamiyah Hassan

P2: Chitosan Tamponade: The Game Changer in The Treatment of Postpartum Haemorrhage
Henrich Wolfgang

P2: Chitosan Tamponade: The Game Changer in The Treatment of Postpartum Haemorrhage

Henrich Wolfgang

Postpartum hemorrhage remains a significant cause of maternal mortality and morbidity worldwide, with higher rates found in resource challenged countries. Conventional use of uterotonics such as oxytocin, prostaglandins, and medications to support coagulation such as fibrinogen and tranexamic acid are helpful but may not be sufficient to arrest life threatening postpartum hemorrhage. Significant postpartum hemorrhage leads to increased need for blood transfusions and the use of invasive techniques such as intrauterine balloon tamponade, compression sutures, and arterial ligation as advanced steps in the management cascade. In extreme cases where hemorrhage is resistant to these therapies, hysterectomy may be necessary to avoid possible maternal death. Uterine packing with the Chitosan-covered tamponade is an emerging tool in the armamentarium of the obstetric team, especially where resources for advance surgical and other invasive options may be limited. The modified chitosan impregnated gauze was originally described in the management of acute hemorrhage in the field of military medicine, combining the physiological anti-hemorrhage effect of the modified chitosan with a compression tamponade for the acute treatment of wound bleeding. The first described use in obstetrics was in 2012 and found the Chitosan-covered tamponade to be an effective intervention to arrest ongoing therapy resistant postpartum hemorrhage. Further studies showed a reduction in hysterectomies and blood transfusions. The method is however underreported and worldwide not yet established. However, if medical treatment failes, it´s now our first choice in our department of Obstetrics at the Charité in Berlin, Germany.

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PLENARY 3

DATO' DR LIM NYOK LING MEMORIAL LECTURE
21th June 2025, Saturday
Chairperson: Azanna A Kamar

P3: Management & Outcomes of Periviable Births- Japanese Experience & the i/AsianNEO Collaboration
Tetsuya Isayama

P3: Management & Outcomes of Periviable Births- Japanese Experience & the i/AsianNEO Collaboration

Tetsuya Isayama

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PLENARY LECTURE 4

PLENARY LECTURE 4
22nd June 2025, Sunday
Chairperson: Zaleha Mahdy

P4: Cardiac Diseases in Pregnancy – A Perinatal Perspective
Tan Lay Kok

P4: Cardiac Diseases in Pregnancy – A Perinatal Perspective

Tan Lay Kok

Cardiac diseases in pregnancy is an increasingly important health issue and there is a need for increased awareness of this. It is the commonest indirect cause of maternal mortality in developed countries, and joint cardio-obstetric services are critically important to provide optimal and evidence based care and counselling from the pre-exemption period, through the antenatal, peripartum and to the postnatal periods. Risk stratification is vital to reassure the patient where appropriate in low risk cases, to counselling in high risk conditions to empower the woman to make a fully informed decision, and support her through the pregnancy. There are important red flags which foretell adverse outcomes, and an increased vigilance is warranted for those with aortopathies, prosthetic heart valves, cardiomyopathies and other class 4 cardiac conditions. Pregnancy does not spare women from having ischaemic heart disease , and it is important to provide clear and accurate information regarding the safety of cardiac interventions to ensure equitable and efficacious care to pregnant women.

SYMPOSIUM 1:

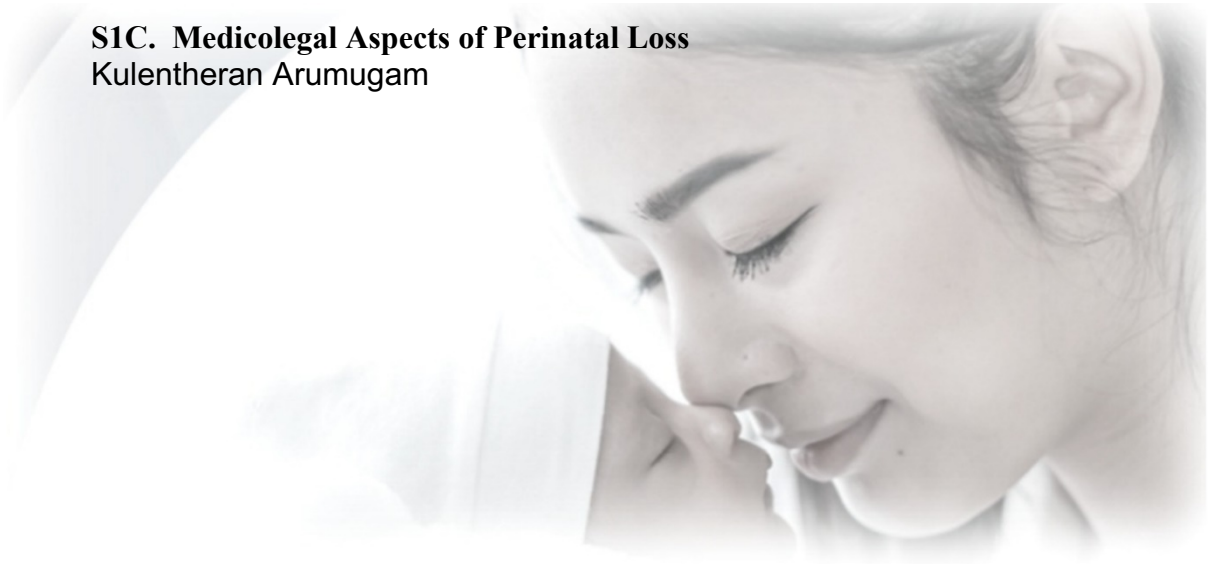
Perinatal Mortality & Morbidity

20th June 2025, Friday
Chairperson: Eric Ang

S1A. Small Babies, Big Risk: Reducing Morbidities in Babies Born SGA
Adrienne Gordon

S1B. The Perinatal "Autopsy" – Lessons Learned
Tan Geok Chin

S1C. Medicolegal Aspects of Perinatal Loss
Kulentheran Arumugam



S1A: Small Babies, Big Risk: Reducing Morbidities in Babies Born SGA

Adrienne Gordon

Small vulnerable newborns (SVNs)—those born preterm, small for gestational age (SGA), or both—make up over a quarter of global livebirths and account for more than half of neonatal deaths. Despite this, progress has stalled, with low birthweight targets off track and limited attention to the underlying pathways of prematurity and fetal growth restriction. In 2020 alone, 35 million SVNs were born. These babies face not only high mortality but also substantial lifelong morbidity—such as neurodevelopmental disability, stunting, and increased risk of non-communicable disease. Using a more precise classification of SVNs (preterm non-SGA, term SGA, preterm SGA) will improve our approach to prevention, targeted care, and follow-up. This talk advocates for investments in data systems and clinical strategies to reduce both mortality and morbidity—because every baby, no matter how small, deserves the chance not just to survive, but to thrive.

S1B: The Perinatal "Autopsy" – Lessons Learned

Tan Geok Chin

Perinatal postmortem examination remains a cornerstone in understanding perinatal mortality, offering vital insights that could reshape clinical understanding and future care strategies. The perinatal autopsy provides a unique opportunity to determine the cause of death, conditions that may impact future pregnancies. Despite advances in prenatal imaging and diagnostics, postmortem examination continues to reveal unexpected findings in a significant number of cases, highlighting its irreplaceable diagnostic value. Additionally, it plays a crucial role in auditing clinical care, guiding counseling for bereaved families, and supporting epidemiological surveillance. Advocacy for improved consent practices and communication with families is essential to counter declining autopsy rates and to maximize the clinical and scientific contributions of this critical investigation. As pathology practice evolves, integration of ancillary techniques such as postmortem MRI, genomic sequencing, and placental histopathology enhances the depth of investigation. From the pathologist's perspective, the value of perinatal postmortem lies not only in establishing the cause of death but also in the lessons learned through systematic examination. In this lecture, a few cases will be discussed to highlight the role of postmortem in determining the cause of death in an unexpected situation.

S1C: Medicolegal Aspects of Perinatal Loss

Kulentheran Arumugam

A recent publication showed that up to 20% of perinatal losses in Malaysia were preventable. This of course raises legal implications. There can be three legal consequences.

The aggrieved parent may take a case of causing death by gross negligence- a criminal liability, or in the tort of negligence, a civil claim, or under Section 29 Medical Act, where a claim of serious professional misconduct is made to the Malaysian Medical Council.

Causing death by gross negligence is hardly made because the standard of proof is very high i.e. beyond reasonable doubt and can be difficult to surmount. For years, a claim in negligence was seldom pursued because the damages that can be claimed may not be worth the plaintiff parent's efforts. But the law has evolved and since 2018 the Federal Court has awarded Aggravated damages as a separate head in medical negligence claims. These can be substantial and it would encourage parents now to sue. Aggravated damages are awarded for injury to feelings including the indignity, mental suffering, humiliation or distress that might be is caused by the doctor's actions- in simple terms for "bad behavior". A claim for serious professional misconduct is an economical way for a parent to ensure that what happened to her will not occur again and to another patient and some parents do take this way the motive being altruistic.

SYMPOSIUM 2:

Preterm Birth & The Small Fetus

20th June 2025, Friday
Chairperson: Fathi Ramly

S2A: Challenges in Prevention
Piya Chaemsaithong

S2B: Preterm Birth - Management Options
Jamiyah Hassan

S2C: Doppler Assessment in Fetal Growth Restriction
Voon Hian Yan

S2A: Challenges in Prevention
Piya Chaemsaithong

S2B: Preterm Birth - Management Options

Jamiyah Hassan

Preterm labour remains a significant challenge in obstetric care, contributing to neonatal morbidity and mortality worldwide. Effective management requires a multifaceted approach, incorporating risk assessment, pharmacological interventions, and supportive care strategies. This presentation will explore current best practices, including the use of tocolytics to delay labour, antenatal corticosteroids for fetal lung maturation, and magnesium sulphate for neuroprotection. Other options include the use of progesterone therapy, cervical cerclage and pessary as preventive measures. Integrating the use of technologies and evidence-based medicine aims to optimize maternal and fetal health Addressing the complexities of preterm birth management need a multidisciplinary team to achieve optimal outcome.

S2C: Doppler Assessment in Fetal Growth Restriction
Voon Hian Yan

Doppler ultrasound or more specifically, spectral doppler has been around for several decades now. As opposed to other forms of doppler, it provides temporal information within a specific location or sample volume.

In the context of fetal growth restriction (FGR), doppler is widely utilized to predict perinatal outcomes, monitor for deterioration and thereby determining the timing of delivery. Whilst the umbilical artery pulsatility index is useful in high risk pregnancies, its routine use in unselected populations is not backed by sound evidence.
The use of doppler in early and late-onset FGR should be distinguished by obstetricians. In this lecture, the speaker also summarizes the use of fetal venous, fetal arterial and maternal arterial dopplers. Common pitfalls in measurement and clinical utility of these dopplers are addressed.

SYMPOSIUM 3:

How to Use Precision Care- The Future

20th June 2025, Friday

Chairperson: Cheong Shu Meng

S3A: Clinical Utility of Perinatal Genomics – Examples from Cases
Thong Meow Keong

S3B: Use of Metabolomics in Neonatal Nutrition – Examples from Cases
Cheah Fook Choe

S3C: Artificial Intelligence in Perinatology – The Way Forward
Quek Yek Song

S3A: Clinical Utility of Perinatal Genomics – Examples from Cases

Thong Meow Keong

Perinatal genomics refers to the application of genetic testing and genomic technologies during pregnancy and the neonatal period. Clinical utility refers to the practical value and effectiveness of a test, intervention, or measure in a clinical setting. It assesses whether the information or outcome provided by a clinical tool is useful for diagnosis, treatment, management, or prevention of a disease, and whether it ultimately leads to improved patient outcomes and overall health. Genomics testing has rapidly emerged as a transformative tool in prenatal and neonatal care, offering significant clinical utility in the early diagnosis, management, and prevention of genetic and congenital disorders.

One of the primary applications of perinatal genomics is in non-invasive prenatal testing (NIPT), which analyses cell-free fetal DNA from maternal blood. This screening tool provides high accuracy for detecting common chromosomal abnormalities and reduces the need for invasive procedures like amniocentesis, thereby minimizing risks to both mother and fetus. Moreover, early detection allows families and clinicians to make informed decisions regarding pregnancy management, including further diagnostic testing, preparation for complex care needs, or therapeutic interventions.

In cases of structural abnormalities detected through prenatal imaging, chromosomal microarray analysis (CMA) and whole-exome sequencing (WES) enhance diagnostic precision. These tools can identify rare monogenic disorders that might not be apparent through conventional testing. Timely diagnosis provides opportunities for early interventions, improves neonatal outcomes, and aids in personalized care planning.

Perinatal genomics also supports family planning and reproductive decision-making. Reproductive carrier screening for autosomal recessive or X-linked conditions helps identify at-risk couples. For example, detecting a metabolic disorder before birth enables targeted monitoring and treatment immediately after delivery. In cases of recurrent pregnancy loss or infertility, genomic analysis may uncover chromosomal rearrangements or mutations, guiding reproductive counselling and in vitro fertilization strategies, including preimplantation genetic testing. Postnatal genomic testing helps in making an earlier diagnosis thus reducing the diagnostic odyssey, making earlier targeted treatment, appropriate surveillance and genetic counselling for the family.

Perinatal genomics contribute to population health insights and long-term health planning. By identifying individuals with increased genetic risks early in life, clinicians can initiate preventive measures, surveillance, or lifestyle adjustments to mitigate future disease burden. However, these benefits must be weighed against ethical considerations such as consent, privacy, and the psychological impact of uncertain or incidental findings.

In conclusion, perinatal genomics significantly enhances the clinical capabilities of prenatal and neonatal care. It enables precise diagnosis, informs clinical decision-making, and contributes to individualized care pathways. As genomic technologies become more accessible and integrated into routine practice, continued efforts are needed to ensure ethical implementation, healthcare provider training, and equitable access to maximize its clinical utility.

S3B: Use of Metabolomics in Neonatal Nutrition – Examples from Cases

Cheah Fook Choe

The study of metabolomics enables comprehensive metabolite assays in biofluids that could provide further insights into the adequacy, balance or imbalances of nutritional interventions. Current nutritional recommendations for preterm newborns are based on extrapolations from the intrauterine nutrient accretion rate and the composition in breast milk, but it remains unclear whether these sufficiently meet extrauterine needs. While parenteral nutrition is the standard of care for preterm infants to bridge the nutritional gap before enteral nutrition is established, parenteral feeding entirely bypasses the intestinal absorptive process. The study of metabolomics can inform in such situations as to whether metabolites are diminished or in excess, which is potentially toxic to the host. The results may thus, guide in re-evaluating parenteral nutrition formulations to support the metabolic demands of preterm infants better, and in simulating the targeted profiles from infants who are exclusively enterally fed. Current available evidence reporting metabolomic outcomes in preterm infants receiving parenteral or enteral nutrition is scarce. Metabolomic profiles were mainly obtained from assays on serum, or dried blood spots and urine samples. The analytical platforms were either ^{1}H-NMR, GC-MS, or UHPLC-MS/MS. Emerging evidence indicates that metabolites such as glucose, amino acids, and short-chain acylcarnitine were upregulated in the biofluids of parenterally-fed infants, suggesting an oversupply. In contrast, a diverse range of choline, amino acids and lipid metabolites, essential for growth and development, were enriched in the exclusively enterally-fed infants. In short, metabolomics could enhance our understanding on how current nutritional formulations contribute to the sufficiency, excess or lack of nutrient assimilation. Future research should aim to establish a database of gestational age-related reference ranges for essential metabolites. This will aid in developing personalised nutrition tailored to the specific needs of the preterm infant, potentially improving their long-term growth and developmental outcomes.

S3C: Artificial Intelligence in Perinatology – The Way Forward
Quek Yek Song

As perinatology evolves in the era of digital health, Artificial Intelligence (AI) has emerged as a transformative force capable of reshaping how we deliver maternal and fetal care. At Moirai Tech, we believe AI is not here to replace the human touch, but to empower it. In this session, I will share our journey in building a real-time, predictive AI ecosystem for pregnancy care—developed in Malaysia and Singapore—designed to assist both patients and healthcare professionals with precision, empathy, and foresight.

Moirai AI system, trained on real-world data from the Moirai Momcare platform, has demonstrated the ability to predict potential timing of delivery and estimated fetal birth weight in cases of Fetal Growth Restriction (FGR), based on serial ultrasound measurements and maternal health parameters. From biometric markers such as CRL, BPD, and abdominal circumference, to maternal indicators like blood pressure, glucose trends, and heart rate variability, we integrate multivariable timelines to generate individualized, real-time predictions.

Beyond diagnostics, Moirai AI also supports user experience—providing reassurance, reducing anxiety, and enabling shared decision-making. This presentation will highlight our clinical framework, technical pipeline, and vision for AI in perinatal practice, including labour progression prediction, wearable integration, and personalized maternal risk profiling.

As we move forward, AI is not just a tool—it is a bridge between data and compassion, science and service. Together, let us shape a future where AI enhances life at its very beginning.

SYMPOSIUM 4:

Diabetes in Pregnancy

20th June 2025, Friday
Chairpersons: Nadzratulaiman Wan Nordin

S4A: Peripartum Considerations for GDM and Diabetic Pregnancies
Tan Lay Kok

S4B: Use of Metformin in Pregnancy
Fathi Ramly

S4C: Continuous Sugar Monitoring – Is it Better?
Nurain Mohd Noor

S4A: Peripartum Considerations for GDM and Diabetic Pregnancies

Tan Lay Kok

The peripartum period is a particularly important and challenging time for the obstetrician caring the both the gestational diabetic and established diabetic pregnant woman. The questions of timing and mode of delivery depend on many factors, ranging from the clinical to medicolegal. While striving to avoid stillbirths as well as neonatal injuries from shoulder dystocia, a rational evidence-based approach is essential, drawing from guidelines and local Asian data to advise women. Delivery units should have local protocols to manage hyperglycaemia and hypoglycaemia and optimise euglycemia for labouring women and those with planned caesarean sections. Multidisciplinary care including anaesthetists and the wider team who is trained in anticipating, recognising, and managing shoulder dystocia is very important, as is the postpartum care of these women.

S4B: Use of Metformin in Pregnancy

Fathi Ramly

Metformin, an oral biguanide agent, has become an increasingly used in managing hyperglycaemia in pregnancy, particularly in gestational diabetes mellitus (GDM) and pre-existing type 2 diabetes mellitus (T2DM). Metformin readily crosses the placenta, yet long-term follow-up studies report no adverse neurodevelopmental impact on offspring.

In GDM, randomized controlled trials (e.g., EMERGE and ACHOIS) demonstrate that metformin reduces maternal weight gain, incidence of macrosomia, and neonatal hypoglycemia without increasing congenital anomalies. A recent meta-analysis by Wu et al. (2024) further confirms reduced risks of preeclampsia (RR 0.61) and NICU admission (RR 0.75) with metformin use. However, there is a noted increase in the risk of small-for-gestational-age infants and preterm birth in some cohorts.
In pregestational T2DM, the MOMPOD and MiTy trials assessed metformin in combination with insulin. Although metformin did not reduce composite neonatal complications compared to insulin alone, it significantly decreased large-for-gestational-age births (adjusted OR 0.63). Side effects such as gastrointestinal discomfort, particularly diarrhea, were more common in the metformin groups.

International guidelines remain divided. While ACOG and ADA prefer insulin as first-line therapy, they support metformin use when insulin is declined or poorly tolerated. Meanwhile, NICE and SOGC endorse metformin more liberally as an initial option.
Given the rising prevalence of GDM and T2DM globally, especially in low- and middle-income countries, metformin presents a cost-effective, safe, and patient-compliant alternative, warranting careful selection and individualized counselling.

S4C: Continuous Sugar Monitoring – Is it Better?

Nurain Mohd Noor

Managing diabetes in pregnancy requires tight glycaemic control to reduce maternal and fetal outcome . Continous Glucose Monitoring (CGM) offers a significant advantage over traditional self- monitoring providing real time glucose data, identifying trends and detecting nocturnal or asymptomatic hypoglycaemia . The lecture will be a brief overview of CGM systems including real time and intermittently scanned CGM and also highlight key clinical evidences on the use of CGM in pregnant women with Type1 , Type2 and gestational diabetes.

SYMPOSIUM 5:

Optimising Preconception Health
21th June 2025, Saturday
Chairperson: Irene Cheah Guat Sim

S5A: Preterm Births <32 Weeks in Malaysia – Lessons Learned from the MNNR
Boo Nem Yun

S5B: Management of MicroPreemies – Experience Sharing & Evidence-Based Framework
Yvonne Ng

S5C: Guaranteeing Haemodynamic Stability of ELBW Neonates
Agnes Tan Sun Mee

S5A: Preterm Births <32 Weeks in Malaysia – Lessons Learned from the MNNR

Boo Nem Yun

Since its inception in 2005, progressively more Malaysian NICUs voluntarily participated in the Malaysian Neonatal Registry (MNNR). By year 2020, there were 44 Malaysian NICU members; they included all major government NICUs, many small public NICUs, one of three University NICUs and several NICUs from private hospitals. The inclusion criteria in the MNNR were all very low birthweight neonates (birthweight<1500g) and gestation 22-32 weeks gestations.

Between 2015-2020, 15663 neonates who met the above inclusion criteria were admitted to these NICUs. Although they contributed to only <5% of the total admission, they had the highest neonatal deaths rates. All these preterm neonates had admission hypothermia. The use of early CPAP, surfactant therapy and total parenteral nutrition rates was less than 75%. Late-onset sepsis (LOS), severe intraventricular haemorrhage (IVH), retinopathy of prematurity (ROP) and BPD were very common in surviving extremely preterm neonates. Incidence of BPD was increasing over the recent years. Increasing proportions of these neonates were born to mothers with diabetes mellitus and hypertension.

Invasive respiratory support was a significant risk factor associated with increased risk of severe IVH, BPD, LOS and ROP. Antenatal steroids were associate with reduced risk of severe IVH. Early nasal CPAP was associated with reduced risk of BPD. These findings suggest that to improve the outcome of these high risk neonates, there is an urgent need to provide adequate basic facilities in the delivery rooms and NICUs, promote use of antenatal steroids, improve systematic training all health care staff in rendering timely basic support and optimal ventilation strategies, prevent nosocomial sepsis, screen for ROP in all surviving extremely preterm neonates, monitor compliance of standard operation procedure, and perform quality improvement projects regularly

S5B: Management of MicroPreemies – Experience Sharing & Evidence-Based Framework

Yvonne Ng

This presentation shares evidence-based strategies and institutional insights from 25 years of NUH's VLBW database. Key achievements include improved survival rates at 24–26 weeks' gestation, reduced necrotising enterocolitis and late-onset infections through high usage of human milk and rigorous infection control bundles. Innovative practices such as the "water-less ICU" initiative further minimize nosocomial risks. Family-centered care is enhanced through neurodevelopmental support, parental psychosocial health screening (EPDS/PHQ-9), and the Home Equipment Loan Programme (HELP) which reduced NICU admission days by 10–14 days per patient. The session underscores how multidisciplinary collaboration and data-driven quality improvement optimize outcomes for these high-risk infants.

S5C: Guaranteeing Haemodynamic Stability of ELBW Neonates

Agnes Tan Sun Mee

Extremely low birth weight (ELBW) neonates face substantial challenges during the transition from fetal to extrauterine life due to their physiological immaturity. Haemodynamic instability is a major contributor to morbidity and mortality in this vulnerable population, making timely identification and intervention critical.

On the first day of life, extremely preterm infants are at high risk of intravascular volume depletion due to immature skin, and relative adrenal insufficiency, which can lead to fluid extravasation. Between 24–72 hours, a shift of extracellular fluid back into the intravascular space raises concerns about volume overload and increases the risk of afterload mismatch. Avoiding fluctuations in blood pressure during this period is essential to prevent intraventricular haemorrhage (IVH). Continuous monitoring is crucial, particularly for haemodynamically significant patent ductus arteriosus (HsPDA), as pulmonary pressure begins to decrease. Certain infants, especially those with sepsis or pulmonary hypoplasia, are at increased risk of developing persistent pulmonary hypertension of the newborn (PPHN).

From 72 hours to one week of life, some neonates begin to stabilise; however, the smallest and most premature, peri-viable infants may remain haemodynamically fragile. Beyond the first week, preterm infants may develop late-onset circulatory collapse due to relative adrenal insufficiency, and also remain at risk for haemodynamic changes caused by late-onset sepsis.

A study conducted at Kitasato University Hospital in Japan illustrates the haemodynamic changes in ELBW infants during the first week of life by analysing trends in targeted neonatal echocardiography (TnECHO) parameters. Japan's TnECHO training system equips most attending medical officers with the skills to perform basic cardiac assessments in neonates, facilitating tailored haemodynamic management.

Ultimately, a structured, physiology-based approach—one that accounts for the dynamic circulatory changes in ELBW neonates and is guided by vigilant monitoring and early echocardiographic evaluation—is essential to improving survival and neurodevelopmental outcomes. Integrating evidence-based tools such as TnECHO into routine care may bridge the gap between pathophysiological insight and real-time clinical decision-making.

SYMPOSIUM 6:

Hypertensive Disorder in Pregnancy
21th June 2025, Saturday
Chairperson: Voon Hian Yan

S6A: First Trimester Prediction & Prevention of Pre-Eclampsia
Piya Chaemsaithong

S6B: Aspirin & the Placenta
Jamiyah Hassan

S6C: Maximising Pharmacotherapy
Tan Lay Kok

S6A: First Trimester Prediction & Prevention of Pre-Eclampsia

Piya Chaemsaithong

Preeclampsia is a major cause of maternal and perinatal morbidity and mortality. Early onset disease requiring preterm delivery is associated with a higher risk of complications in both mothers and babies. Evidence suggests that the administration of low dose aspirin initiated before 16 weeks' gestation significantly reduces the rate of preterm preeclampsia. Therefore, it is important to identify pregnant women at risk of developing preeclampsia during the first trimester of pregnancy, thus allowing timely therapeutic intervention. Several professional organizations such as the American College of Obstetricians and Gynecologists (ACOG) and National Institute for Health and Care Excellence (NICE) have proposed screening for preeclampsia based on maternal risk factors. The approach recommended by ACOG and NICE essentially treats each risk factor as a separate screening test with additive detection rate and screen positive rate. Evidence has shown that preeclampsia screening based on the NICE and ACOG approach has suboptimal performance, as the NICE recommendation only achieves detection rates of 41% and 34%, with a 10% false-positive rate, for preterm and term preeclampsia, respectively. Screening based on the 2013 ACOG recommendation can only achieve detection rates of 5% and 2% for preterm and term preeclampsia, respectively, with a 0.2% false positive rate. Various first trimester prediction models have been developed. Most of them have not undergone or failed external validation. However, it is worthy of note that the Fetal Medicine Foundation (FMF) first trimester prediction model (namely the triple test), which consists of a combination of maternalfactors and measurements of mean arterial pressure, uterine artery pulsatility index, and serum placental growth factor, has undergone successful internal and external validation. The FMF triple test has detection rates of 90% and 75% for the prediction of early and preterm preeclampsia, respectively, with a 10% false positive rate. Such performance of screening is superior to that of the traditional method by maternal risk factors alone. The use of the FMF prediction model, followed by the administration of low dose aspirin, has been shown to reduce the rate of preterm preeclampsia by 62%. The number needed to screen to prevent 1 case of preterm preeclampsia by the FMF triple test is 250. The key to maintaining optimal screening performance is to establish standardized protocols for biomarker measurements and regular biomarker quality assessment, as inaccurate measurement can affect screening performance. Tools frequently used to assess quality control include the cumulative sum and target plot. Cumulative sum is a sensitive method to detect small shifts over time and point of shift can be easily identified. Target plot is a tool to evaluate deviation from the expected multiple of median and the expected median of standard deviation. Target plot is easy to interpret and visualize. However, it is insensitive to detecting small deviations. Adherence to well-defined protocols for the measurements of mean arterial pressure, uterine artery pulsatility index, and placental growth factor is required. In this presentation, we will summarize the existing literature on the different methods, recommendations by professional organizations, quality assessment of different components of risk assessment, and clinical implementation of the first trimester screening for preeclampsia.

S6B: Aspirin & the Placenta

Jamiyah Hassan

Pre-eclampsia is a leading cause of maternal and fetal complications, often linked to placental dysfunction and impaired blood flow. Emerging evidence suggests that low-dose aspirin plays a crucial role in optimizing placental health by reducing inflammation, improving vascular function, and preventing excessive clot formation.

Aspirin enhances placental perfusion, including its ability to inhibit platelet aggregation and promote vasodilation, thereby reducing the risk of placental insufficiency and fetal growth restriction. Clinical guidelines recommend initiating low-dose aspirin between 12–16 weeks of gestation, particularly in high-risk pregnancies, to mitigate the progression of pre-eclampsia until 36 weeks.

S6C: Maximising Pharmacotherapy

Tan Lay Kok

While the number of drugs available in Obstetrics to manage preeclampsia is limited, substandard care in preeclampsia and other hypertensive disorders lies in suboptimal use of these drugs. This applies to blood pressure control, where a failure to achieve optimal control leads to increased adverse maternal and perinatal outcomes, as well as omission or late administration of magnesium sulphate to both prevent and treat eclamptic convulsions. There is now incontrovertible evidence that low dose aspiring started between 12 -16 weeks gestation reduces preterm preeclampsia, and even in high-risk cases such as chronic hypertension, would delay the onset of preterm preeclampsia to a later gestation than would otherwise have occurred without the aspirin. Maximising pharmacotherapy therefore requires not only awareness but also effective systems to allow screening, early detection and alerting staff to prompt and timely intervention.

SYMPOSIUM 7:

Family-Integrated & Follow-Up Care

21th June 2025, Saturday
Chairperson: Neoh Siew Hong

S7A: How to Initiate & Sustain Family Integrated Care (Fi Care)
Rajammal Kaliappan

S7B: Post-Discharge Follow-Up for High-Risk Infants
Quek Bin Huey

S7C: Bereavement Counselling Post-Perinatal Loss: How Should This Be Done?
Andrienne Gordon

S7A: How to Initiate & Sustain Family Integrated Care (Fi Care)

Rajammal Kaliappan

The current Neonatal Intensive Care Unit (NICU) is a highly technological environment tailored to provide care for the smallest and sickest infants. Although parents remain highly critical to the care process of infants in the NICU, operational requirements result in an environment where infants are physically, psychologically, and emotionally separated from their parents. When an infant is admitted to the NICU, the ability of parents to spend quality time and provide meaningful care for their infant is often restricted. In addition, the premature birth of their child and the intimidating environment of the NICU may place additional stress on parents. These factors pose a threat to the development of an ideal parent-infant relationship, which may have negative consequences for the growth and development of the infant. To address this concern, many programs are implemented to encourage greater parent involvement in the care of their infants. However, such programs are implemented in line with the usual practice where only NICU professionals provide direct care for the infant. As such, parents are generally delegated to a supportive role which results in numerous parents feeling unprepared and apprehensive to care for their infants after discharge. Hence, Family Integrated Care (FIC) was introduced to alleviate such problems by ensuring that parents are involved in the care of their infants in the NICU.

FIC aims to engage parents and allow them to play a more significant role in the care process of their infants. Parents are involved in the day-to-day care of their infant which helps to strengthen the bond between the parent and the infant. This builds confidence in parents and helps to facilitate a smooth transition when the infant is discharged. Nurses play an integral role in implementing FIC by providing guidance through support, supervision and education to encourage parents to be active members of the team that takes care of the infant. Nurses also best understand the distinct medical needs of the infant as well as the unique role that parents can play to care for their infants. As such, nurses are best placed to educate parents on the best way to care for their infants and are equipped with the necessary skills to guide and support parents.

FIC has resulted in numerous benefits for both parents and the infant. It is a highly effective method to increase parent-infant interaction and to strengthen the bond between parent and infant.

S7B: Post-Discharge Follow-Up for High-Risk Infants

Quek Bin Huey

Advances in Neonatal Care have resulted in improved survival of the Extremely Premature Infants. However, they are at risk of poor nutrition and growth, as well as long term health and developmental issues, compared to children born full-term. Follow-up and timely interventions are thus important. This is a summary of evidence and recommended guidelines on follow-up of these high-risk infants.

S7C: Bereavement Counselling Post-Perinatal Loss: How Should This Be Done?

Andrienne Gordon

The death of a baby through stillbirth or neonatal loss is devastating, with lifelong emotional, social, and psychological impacts for parents and families. Bereavement care that is respectful, culturally safe, and responsive to individual needs is not optional—it is essential. This talk outlines best practice bereavement care drawing on recent clinical guidelines, emphasizing the critical components of continuity, communication, recognition of parenthood, and support into subsequent pregnancies. With the principle of "one chance to get it right," we will explore practical, evidence-based approaches and also highlight the importance of clinician wellbeing, training (eg IMPROVE program), and system-level change to ensure all families receive high-quality, compassionate care, regardless of location or circumstance.

SYMPOSIUM 8:

Models of Patinet & Family-Centered Care

21th June 2025, Saturday

Chairperson: Lim Seng Keat

S8A: Overview of Family Centred Care
Nadzratulaiman Wan Nordin

S8B: Models of Perinatal Care in the Community
Carol Lim KK

S8C: The ECHO Model of Patient-Centred Care in Perinatology
Zaleha Mahdy

S8A: Overview of Family Centred Care

Nadzratulaiman Wan Nordin

Family-centered care is a partnership healthcare approach in managing a patient. This approach emphasizes on collaboration among patients, families and healthcare providers. It recognizes the vital role of the family in the patient's life and involves them as partners in care planning, decision-making, and delivery of healthcare services. In the maternity and neonatal care, families be it the nucleus or extended family members are usually involved in birth plans, care in postpartum period both physical and mental health of mothers, breastfeeding and NICU involvement.

The core principles are respect and dignity, information sharing, participation and collaboration. The benefits includes improved patient and family satisfaction, better health outcomes and adherence to treatment, decreased anxiety and stress for patients and families, enhanced communication and trust between healthcare teams and families and more efficient use of healthcare resources.

However there are still challenges in implementing them where time and resource constraints in busy healthcare settings can be a hindrance and training healthcare providers to shift from provider-centered models is another big challenge. Balancing patient autonomy and family input with cultural differences and varying family dynamics can be a setback.

Family-centered care is a holistic approach that transforms traditional patient care by acknowledging the family's central role in the healing process. By fostering respect, communication, and partnership, this approach can contributes to higher quality, safer, and more compassionate healthcare.

S8B: Models of Perinatal Care in the Community

Carol Lim KK

Perinatal care encompasses both medical and nursing care for mothers and their newborns, from the time of 22 weeks of pregnancy until 1st week after delivery.

There are many different models of perinatal care, all of which aim to provide the best care to mothers, unborn fetuses, and their newborns, both in the community and in hospitals. And community health plays an immense role in ensuring mothers are in optimal health for their pregnancies, deliveries, and postpartum periods.

In Malaysia, despite the progress made by the Ministry of Health, we still face the challenges of inadequate antenatal care for pregnant mothers, including citizens who are provided healthcare at minimal cost. Unfortunately, inadequate antenatal care often leads to untoward outcomes, morbidity, and even mortality, of both the mothers and the newborns.

Aside from the routine care (antenatal care, postnatal care, care of the newborn), we have to cater to emergency maternal & neonatal care too. And these often include the use of emergency services such as flying doctors or retrieval services.

Training and continuous education are important to ensure the provision of good quality care.

This presentation attempts to illustrate and share the way forward in the area of public-private collaboration, including NGOs; how to be inclusive in providing care to everyone irrespective of citizenship; and how to make healthcare affordable. In short, in line with the theme for World Health Day 2025 - Healthy Beginnings, Hopeful Futures.

S8C: The ECHO Model of Patient-Centred Care in Perinatology

Zaleha Mahdy

The Extension of Community Health Outcomes (ECHO) Project is a tele-mentoring model that enhances healthcare capacity by connecting specialists with front-line providers through virtual collaborative learning.

While the ECHO model is widely adopted globally, its presence in Malaysia remains limited. In contrast, Indonesia has actively integrated ECHO into its maternal and child health programs. Through Project ECHO, Indonesian healthcare workers engage in regular virtual sessions focused on improving antenatal care, reducing maternal mortality, and enhancing neonatal outcomes.

These sessions include case-based discussions and evidence-based guideline sharing, fostering continuous professional development in underserved areas. The Indonesian experience demonstrates the potential of ECHO to bridge knowledge gaps and support health system strengthening in Southeast Asia.

SYMPOSIUM 9:

Sepsis in Newborns

21th June 2025, Saturday
Chairperson: Azanna Ahmad Kamar

S9A: Understanding the Root Cause - Pathology of Fetal Inflammatory Response Syndrome (FIRS)
Tan Geok Chin

S9B: Evidence-Based Approach to Management of Septicaemic Shock
Wong Ann Cheng

S9C: Step-by Step Haemodynamics for Assessment & Monitoring of the Septic Baby
Wong Chee Sing

S9A: Understanding the Root Cause - Pathology of Fetal Inflammatory Response Syndrome (FIRS)

Tan Geok Chin

Fetal inflammatory response (FIR) represents a critical component of intrauterine host defense. It is a histopathological hallmark of fetal systemic activation, most clearly demonstrated by the presence of funisitis and chorionic vasculitis in placental and umbilical cord tissues. It signify a fetal response to intrauterine stress and is increasingly recognised as predictive markers of short- and long-term neonatal morbidity. Placenta assessment provides essential insights into the timing, severity, and progression of inflammatory processes. The identification and staging of FIR, particularly in the context of maternal inflammatory response (MIR), allow for more precise clinicopathological correlation. FIR is strongly associated with preterm birth, neonatal sepsis, cerebral palsy, and other adverse outcomes. FIR can be staged into stage 1, stage 2 and stage 3, depending on the location of the inflammation. Higher stage FIR was found more likely to be associated with adverse neonatal outcomes. In this lecture, we will explore the important of tissue sampling to avoid incorrect staging of FIR, and the compare the incidence of FIR between local and international settings. In conclusion, FIR is a powerful indicator of fetal distress. Its accurate identification by the pathologist can facilitate meaningful clinical decision-making and long-term risk assessment.

S9B: Evidence-Based Approach to Management of Septicaemic Shock

Wong Ann Cheng

Neonatal septicemic shock remains a leading cause of morbidity and mortality in neonatal intensive care units worldwide, particularly among preterm infants. Despite advances in supportive care, mortality rates can still reach 20–50%. An evidence-based approach to recognizing, diagnosing, and managing neonatal septic shock is essential to improving clinical outcomes, with emphasis on timely intervention and protocolized care.

Core aspects include the epidemiology and evolving definitions of neonatal sepsis and shock, acknowledging the challenge posed by the absence of standardized, neonatal-specific diagnostic criteria. The neonatal Sequential Organ Failure Assessment (nSOFA) score is a valuable tool for quantifying organ dysfunction and predicting mortality risk. Additionally, newer modalities such as Near-Infrared Spectroscopy (NIRS), HeRO monitoring, and Targeted Neonatal Echocardiography (TNE) enhance individualized hemodynamic assessment and clinical decision-making.

Prompt identification based on clinical signs and biomarkers, coupled with the administration of empirical antibiotics within the first hour, is critical for improving survival. Blood cultures and inflammatory markers such as C-reactive protein (CRP) and procalcitonin play a vital role in guiding antimicrobial therapy.

Management strategies include judicious fluid resuscitation tailored to gestational age, careful use of vasoactive agents, and the implementation of adjunctive therapies like corticosteroids in cases of catecholamine-resistant shock. The complex pathophysiology of neonatal septic shock, ranging from mitochondrial and microvascular dysfunction to cardiorespiratory compromise, requires a comprehensive, individualized approach.

In summary, early recognition and structured care using evidence-based guidelines can significantly reduce neonatal sepsis-related mortality. Combining clinical acumen with real-time monitoring tools and up-to-date therapeutic strategies helps to improve outcomes for these vulnerable infants.

S9C: Step-by Step Haemodynamics for Assessment & Monitoring of the Septic Baby

Wong Chee Sing

Neonatal sepsis is a major cause of morbidity and mortality in Neonatal Intensive Care Units (NICUs), with cardiovascular dysfunction being the leading contributor to sepsis-related deaths. This dysfunction encompasses myocardial impairment, dysregulated vascular tone—manifesting as systemic vasodilation or vasoconstriction—and pulmonary hypertension (PHT), which occurs in approximately 25–50% of affected neonates. Timely recognition, prompt antibiotic therapy, and appropriate circulatory support are critical to improving outcomes and reducing complications.

However, commonly used clinical parameters such as blood pressure, capillary refill time, urine output, and serum lactate are often unreliable indicators of systemic blood flow in neonates, potentially delaying appropriate intervention. In this context, targeted neonatal echocardiography has become an essential tool for bedside assessment. It allows real-time evaluation of intravascular volume status, ventricular function, systemic blood flow, and the presence of acute pulmonary hypertension—thereby aiding in the early identification of specific shock phenotypes.

While sepsis phenotyping has been extensively studied in adults—often incorporating lung ultrasound—similar principles can be translated to neonatal care. By combining targeted echocardiography with a structured physiological approach, clinicians can better characterize the underlying pathophysiology of septic shock in neonates and tailor management strategies accordingly. This individualized, phenotype-driven approach holds great promise in improving both short- and long-term outcomes in this vulnerable population.

SYMPOSIUM 10:

The Delivery Suite

21th June 2025, Saturday
Chairperson: Carol Lim KK

S10A: SOFIE: Sonography Only and Few Internal Examinations for Normal Delivery
Henrich Wolfgang

S10B: Baby Born Flat
Choo Yao Mun

S10C: 3rd & 4th Degree Tears – How to Manage
Albert Tan

S10A: SOFIE: Sonography Only and Few Internal Examinations for Normal Delivery
Henrich Wolfgang

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S10B: Baby Born Flat

Choo Yao Mun

The term "born flat" colloquially describes a neonate exhibiting no detectable respiratory effort, no heart rate (Apgar score of 0 at birth), and requiring immediate, extensive resuscitation. This critical condition, often termed Apgar 0 or perinatal asphyxia/cardiorespiratory arrest at birth, represents a medical emergency demanding rapid, expert intervention. This abstract outlines the etiology, immediate management, and potential long-term outcomes associated with this severe presentation.

Infants are born flat primarily due to profound intrapartum asphyxia resulting from acute interruption of oxygen supply immediately before or during delivery. Common causes include umbilical cord prolapse or compression, severe placental abruption, uterine rupture, maternal cardiac arrest, or profound fetal-maternal hemorrhage. Less frequently, congenital anomalies, severe prematurity, or sepsis may be implicated. Prompt recognition and initiation of resuscitation according to Neonatal Resuscitation Program (NRP) guidelines are paramount. This involves immediate drying, positioning, suctioning if needed, and simultaneous initiation of effective positive pressure ventilation (PPV) with 100% oxygen within the "Golden Minute," followed by chest compressions coordinated with ventilation (3:1 ratio) if the heart rate remains undetectable or <60 bpm after 30 seconds of effective PPV. Therapeutic hypothermia (cooling) is standard care for infants ≥ 36 weeks gestation with moderate to severe hypoxic-ischemic encephalopathy (HIE) following successful resuscitation.

Outcomes are highly variable and critically dependent on the duration of the arrest, the speed and effectiveness of resuscitation, and the underlying cause. Survivors face significant risks. Neonatal encephalopathy is the primary concern, potentially leading to severe neurological sequelae including cerebral palsy, developmental delay, intellectual disability, epilepsy, and sensorineural hearing or vision loss. Multi-organ dysfunction (kidney, liver, heart, lung) is also common acutely. Mortality remains high, especially with prolonged resuscitation times exceeding 10-20 minutes without return of spontaneous circulation (ROSC). Long-term neurodevelopmental outcomes range from normal function (rare) to profound disability. Prevention focuses on optimal antenatal care, timely identification and management of intrapartum complications, and immediate access to skilled resuscitation teams. Infants born flat represent the most extreme end of the birth depression spectrum, requiring coordinated, advanced life support and carrying substantial risks of mortality and significant long-term morbidity.

S10C: 3rd & 4th Degree Tears – How to Manage

Albert Tan

Third- and fourth-degree perineal tears, also known as obstetric anal sphincter injuries (OASIS), are among the most severe forms of birth-related trauma and can lead to significant long-term complications if not accurately diagnosed and managed. These injuries involve partial or complete disruption of the anal sphincter complex, with fourth-degree tears also extending into the anorectal mucosa. Prompt recognition and meticulous repair are essential to restoring anatomy, preserving continence, and ensuring optimal functional recovery.

This presentation provides a comprehensive review of current best practices in the management of third- and fourth-degree perineal tears, with a focus on accurate classification, surgical techniques, and postpartum care. Risk factors such as primiparity, instrumental deliveries, midline episiotomy, prolonged second stage of labour, and fetal macrosomia will be briefly discussed to enhance early recognition and prevention strategies.

Accurate diagnosis relies on careful perineal and rectal examination immediately following delivery, ideally performed by a trained clinician. Classification based on the RCOG system ensures standardized communication and guides appropriate intervention.
Surgical repair should be undertaken in an operating theatre under adequate anaesthesia, with good lighting and equipment. End-to-end or overlapping techniques are commonly used for external anal sphincter repair, while internal sphincter and mucosal injuries require layered closure with absorbable sutures. Attention to tissue handling, hemostasis, and suture choice are critical for optimal outcomes.

Postoperative care includes a structured bowel regimen, pain management, prophylactic antibiotics, and physiotherapy referral. Women should be offered follow-up in a dedicated perineal or pelvic floor clinic, ideally within 6–12 weeks postpartum. Long-term complications such as anal incontinence, perineal pain, and sexual dysfunction should be actively assessed and managed.

Future childbirth planning should involve a multidisciplinary discussion, taking into account the severity of the injury, residual symptoms, and patient preferences. Elective caesarean section may be considered for those with significant morbidity.
This presentation will emphasize a practical, evidence-based approach to managing severe perineal trauma, aiming to improve both short- and long-term outcomes for affected women.

ORAL FREE PAPER PRESENTATIONS

20th June 2025, Friday
Golden Triangle 1 & 2
Chairperson: Dr Chye Joon Kin
Neonatal Oral Papers (session I)

A-0038 Randomized Controlled Trial on Efficacy and Safety of Oral Paracetamol Versus Intravenous Paracetamol in Preterm Infants with Patent Ductus Arteriosus
Nurshafinaz Salmah MOHD FEZAL[1,2], Mohd Rizal MOHD ZAIN[1,2], Anis Munirah MOHD KORI[1,2], Hans Van ROSTENBERGHE[1], Noraida RAMLI[1,2],
[1]Paediatric Department, School of Medical Sciences, Universiti Sains Malaysia, 16150 Kubang Kerian, Kelantan
[2]Paediatric Department, Hospital Pakar Universiti Sains Malaysia, 16150 Kubang Kerian, Kelantan

A-0043 MDR *Acinetobacter baumannii* (MDR ACB) Outbreak in NICU Hospital Tuanku Ja'afar Seremban: A Hospital-based Retrospective Study
Magdalene Chee MX, Neo SC, Pauline Choo PL, David Ng CE
Department of Paediatrics, Hospital Tuanku Ja'afar, Seremban

A-0044 Impact of Delayed Cord Clamping on Neonatal Outcomes and Iron Status at 3 months of age in Term Infants: A Cohort Study at Hospital Tuanku Ja'afar Seremban
Magdalene Chee MX, Lee SY, Pauline Choo PL
Department of Paediatrics, Hospital Tuanku Ja'afar, Seremban

A-0048 Randomised Controlled Trial on Short Term Effect of High Versus Low Position of Umbilical Catheter in Neonates
Ling Hong LEE, Noraida RAMLI, Farohah CHE MAT ZAIN, Nor Rosidah IBRAHIM, Anis Munirah MOHD KORI
Department of Paediatrics, Hospital Pakar Universiti Sains Malaysia, 16150 Kubang Kerian, Kelantan

A-0053 Optimizing Screening Strategies for Congenital Infections: Insights from a Decade of Neonatal Data
Naveen Nair GANGADARAN, NORFAIRUZA Nordin, Nafis IDRIS, Nurul Najwa MUSTAPA, Chia Lin OOI, Sangeeta RAJINDRAN, Parvinder Kaur GERNAM SINGH, Eric Boon Kuang ANG
Department of Paediatrics, Hospital Sultanah Bahiyah, Alor Setar, Kedah

A-0098 The Association between Antenatal Care and Neonatal Outcomes of Infants Born to Single Unwed Mothers at a Tertiary Care Centre: a Six Year Review
Ong Lay Ping, Associate Prof. Azanna Ahmad Kamar, Prof. Mary Joseph Marret
Faculty of Medicine, University Malaya

20th June 2025, Friday
Central Walk 1 & 2
Chairperson: Prof. Dr Jamiyah Hasan
Obstetric Oral Papers

A-0019 Preventing Adolescent Pregnancy: An Imperative for Improving Perinatal Outcomes

Ming Lee Chin[1], Heama Latha Nair[2], Rohani Abdul Jalil[1]
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[2]School of Law and Governance, Taylor's University, Selangor Darul Ehsan, Malaysia

A-0026 Investigating the role of ABCA9 in placental lipid metabolism

Hannah EJ Yong[1], Josie YH Phang[1], Gwyneth PY Tan[1], Hai Ning Wee[2], Amaury Cazenave-Gassiot[3], Mahroe LT Nana[1], Swee Leng Lee[1], Tania YL Mah[1], Shiao-Yng Chan[1,2,4]

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[3]Singapore Lipidomics Incubator, Life Sciences Institute, National University of Singapore, Singapore
[4]National University Hospital, Singapore, Singapore

A-0027 Greater adherence to a vege-fruit-nut dietary pattern and higher pregnancy plasma vitamins B2 and B6 associate with reduced risk of preterm delivery

Shiao-yng Chan[1,2,3], Hsin Fang Chang[2], Han Zhang[3], Hannah Ee Juen Yong[3], Jui-Tsung Wong[3], Ling-Wei Chen[4], Sheila J Barton[5], Philip Titcombe[5], Shan Xuan Lim[6], Jun Shi Lai[3], Elizabeth Tham[3,7], Sarah El-Heis[5,8], Benjamin B Albert[9], Mary Chong[6], Wayne Cutfield[9], Keith Godfrey[5,8]

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[5]MRC Lifecourse Epidemiology Centre, University of Southampton, Southampton, United Kingdom
[6]Saw Swee Hock School of Public Health, National University of Singapore, National University Health System, Singapore
[7]Department of Paediatrics, Yong Loo Lin School of Medicine, National University of Singapore, Singapore
[8]NIHR Southampton Biomedical Research Centre, University of Southampton and University Hospital Southampton NHS Foundation Trust, Southampton, United Kingdom
[9]Liggins Institute, Auckland, New Zealand

20th June 2025 Friday
Central Walk !&2
Chairperson:
Neonatal Oral Papers (Session II)

A-0032 Home Visits and Home Visiting Programmes for Preterm, Small for Gestational Age and Low Birth Weight Infants after Hospital Discharge - A Scoping Review

Wai Cheng FOONG[1], Jacqueline J HO[1,2], Siew Cheng FOONG[1], Nanthida PHATTRAPRAYOON[3], Yudha Nur PATRIA[4,5], Indah Kartika MURNI[4,5], May Loong TAN[1,2], May Winn TEOH[1], Colin P BRADLEY[1], Evelyn ANAND[1,2]
[1]RCSI & UCD Malaysia Campus, Penang, Malaysia
[2]Cochrane Malaysia, Penang, Malaysia
[3]Princess Srisavangavadhana College of Medicine, Chulabhorn Royal Academy Bangkok, Thailand
[4]Dr Sardjito Hospital, Universitas Gadjah Mada, Yogyakarta, Indonesia.
[5]Cochrane Indonesia, Yogyakarta, Indonesia

A-0035 Factors Affecting Survival and Length of Hospital Stay Among Infants with Down Syndrome

Siti Nor Raudzah Bte Bunari[1], Mohamad Shafiq Azanan[2], Adam Al Anas[1], Azanna Binti Ahmad Kamar[2]
[1]Hospital Sultanah Bahiyah, Alor Setar, Kedah, Malaysia
[2]Department of Paediatrics, Faculty of Medicine, Universiti Malaya, Wilayah Persekutuan Kuala Lumpur, Malaysia

A-0060 A Three-Year Retrospective Review of Persistent Pulmonary Hypertension of the Newborn (PPHN) treated with Inhaled Nitric Oxid in a District Specialist Hospital in Perak

Lavintherraja Ramasamy[1], Ming Lee Chin[1], Rohani Abdul Jalil[1], Rosilawati Abdul Rani[2]
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SYMPOSIUM 11:

Emergencies & Stabilising the Neonate
22nd June 2025, Sunday
Chairperson: Wong Ann Cheng

S11A: The Bleeding Infant – Approach to Coagulopathy
Lilian Ngo

S11B: Intrapartum Suctioning, Ventilation Strategies & Controversies in the Management of Meconium Aspiration Syndrome (MAS)
Eric Ang

S11C: Tailor-Made Circulatory Management of Severe Persistent Pulmonary Hypertension of the Newborn (PPHN)
Tetsuya Isayama

S11A: The Bleeding Infant – Approach to Coagulopathy

Lilian Ngo

Neonatal coagulopathies present complex diagnostic and therapeutic challenges due to the distinct developmental physiology of the neonatal hemostatic system, characterized by lower levels of both pro and anticoagulant factors, structurally unique fibrinogen, and immature platelet function. These challenges are further amplified in preterm infants, who exhibit even greater immaturity in hepatic synthesis of clotting factors, reduced platelet reactivity, and heightened susceptibility to both bleeding and thrombotic complications. Conventional coagulation tests such as PT, aPTT, and D-dimer are often unreliable in this population. Given these limitations, there is growing interest in the use of whole blood hemostasis assays such as thromboelastography (TEG) and rotational thromboelastometry (ROTEM) and primary hemostasis tools like the PFA-100 CT-ADP to better predict and manage bleeding in neonates, although neonatal-specific reference ranges remain undefined.

This presentation reviews both inherited and acquired coagulopathies, emphasizing a structured diagnostic approach and initial stabilization strategies tailored to neonates presenting with significant bleeding. Recommended workup includes comprehensive clinical assessment, standard coagulation studies, and clotting factor assays. Tools to arrest bleeding include judicious use of blood components (e.g., platelets, cryoprecipitate, fresh frozen plasma), vitamin K, and antifibrinolytics such as tranexamic acid. In refractory cases, procoagulant agents like recombinant activated factor VII (rFVIIa) and prothrombin complex concentrates may be required.

S11B: Intrapartum Suctioning, Ventilation Strategies & Controversies in the Management of Meconium Aspiration Syndrome (MAS)

Eric Ang

MAS is clinical condition presenting with respiratory distress in a neonate born through meconium-stained amniotic fluid (MSAF) with symptoms cannot be explained otherwise, and with typical radiological findings. It is usually graded as mild when FiO2 requirement is < 0.4 for < 48 hours; moderate when FiO2 needed is > 0.4 for 48 hours but without air leak; and severe when mechanical ventilation is needed for > 48 hours with or without pulmonary hypertension.

The delivery room management of neonates born through (MSAF) has evolved over the years, with the latest guidelines not recommending routine intratracheal suctioning even in non-vigorous neonates, unless airway obstruction is suspected. Concerns related to procedure-associated complications and a potential delay in initiating positive pressure ventilation in a depressed baby has led to this recommendation.

Risk factors associated with development of MAS includes history of fetal distress, metabolic acidosis on cord blood gas and low Apgar score at 5 minutes; maternal history of infection; neonates delivered via caesarean section, and thick meconium. Severity of radiological findings doesn't correlate with clinical. Lung ultrasound is a potential modality for diagnosis and prognostication.

Nasal CPAP is found to be better than oxygen therapy alone in avoiding mechanical ventilation, but up to 40% of neonates with MAS still needs mechanical ventilation. Escalation to invasive ventilation shouldn't be delayed if indicated. Invasive ventilation is complicated by the heterogenous nature of the lung disease, with areas of atelectasis and hyperinflation. Currently, there is limited evidence to support the best ventilation strategies in a neonate with MAS. Choice of ventilation modes should be tailored to the degree of MAS and the presence of complications including persistent pulmonary hypertension of newborn (PPHN) and pulmonary air leak syndrome.

Surfactant therapy is supported by various bodies and is found to be associated with reduction in severity of MAS. It can be delivered as a bolus at 4 to 6ml/kg; or through lung lavage therapy. Postnatal steroids are used to mitigate the inflammatory process involved in MAS however, evidence for this practice is limited and warrants further research.

Neonates with MAS can be associated with hypoxic-ischaemic encephalopathy, a routine neurological examination should be done, and if indicated, managed with therapeutic hypothermia. MAS is also frequently associated with pneumothoraxes, and PPHN. Ventilated neonates with severe MAS should be sedated and if there is evidence of pulmonary hypertension, pulmonary vasodilators including inhaled nitric oxide should be initiated early. Management of PPHN including choice of vasopressor and inotropic support is guided by findings on echocardiography.

Neonates with MAS can have a range of clinical course, from mild to a severe, complicated disease and management should be prompt and individualized. Many areas of management are still controversial, and further research is warranted to improve outcomes in these babies.

S11C: Tailor-Made Circulatory Management of Severe Persistent Pulmonary Hypertension of the Newborn (PPHN)
Tetsuya Isayama

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SYMPOSIUM 12:

Obstetric Emergencies

22nd June 2025, Sunday
Chairperson: Jamiyah Hassan

S12A: Optimal Prenatal Diagnosis of Placenta Accreta Spectrum (PAS)
Savitree Pranpanus

S12B: Peripartum life-threatening diseases: amniotic fluid embolism and aortic dissection
Henrich Wolfgang

S12C: Treatment Options for Placenta Accreta Spectrum
Savitree Pranpanus

S12A: Optimal Prenatal Diagnosis of Placenta Accreta Spectrum (PAS)

Savitree Pranpanus

The incidence of placenta accreta spectrum (PAS) is increasing globally and is strongly associated with the rising rate of cesarean deliveries. PAS is a serious obstetric condition that can lead to life-threatening complications during childbirth, including massive hemorrhage, injury to adjacent organs, and maternal mortality. Early and accurate prenatal diagnosis is crucial for reducing surgical risks and improving clinical outcomes. Pregnant women at high risk for PAS should undergo screening during the first or mid-trimester. If placenta previa is identified, follow-up imaging to assess for PAS is recommended in the late second and third trimesters. Diagnosis by experienced specialists using high- resolution ultrasound—both transabdominal and transvaginal—with 2D and 3D techniques during the appropriate gestational period offers high diagnostic accuracy. This imaging approach supports the optimal timing of delivery, appropriate surgical planning, and preparation for multidisciplinary team management.

S12B: Peripartum life-threatening diseases: amniotic fluid embolism and aortic dissection
Henrich Wolfgang

…….

S12C: Treatment Options for Placenta Accreta Spectrum

Savitree Pranpanus

Placenta accreta spectrum (PAS) is a leading cause of severe obstetric hemorrhage and often necessitates massive blood transfusion. The standard treatment has traditionally been cesarean hysterectomy without attempted placental removal, aiming to minimize life-threatening complications.

However, in recent years, conservative surgical approaches have been introduced, offering comparable outcomes with potentially fewer complications related to hysterectomy. Conservative management may be a viable option in specialized centers with adequate multidisciplinary expertise, and only after thorough counseling of the patient regarding risks and benefits. Due to limited high-quality data comparing treatment strategies, management should be individualized based on clinical circumstances, surgical expertise, and patient preferences.

SYMPOSIUM 13:

Immune Health & Nutrition

22nd June 2025, Sunday
Chairperson: Cheah Fook Choe

S13A: Enhancing Immunity with Early Nutrition – Early Colostrum & Antenatally Expressed Breast Milk
Kartika Darma Handayani

S13B: Evidence-Based TPN Prescription: How Best to Determine Nutrition Requirements
Yvonne Ng

S13A: Enhancing Immunity with Early Nutrition – Early Colostrum & Antenatally Expressed Breast Milk

Kartika Darma Handayani

Kartika Darma Handayani, Wurry Ayuningtyas, Mahendra Tri Arif Sampurna, Dina Angelika, Martono Tri Utomo, Risa Etika

Neonatology Division, Department of Child Health, Universitas Airlangga, Dr Soetomo Academic Hospital Surabaya

Yearly, more than 600,000 infants in Indonesia, are either born prematurely or classified as high-risk. These infants have less developed physiology and are more prone to illnesses. Therefore, they demand distinct approaches and provide different challenges to ensure proper early nutrition for these infants. Mothers need to be educated and informed on human breast milk composition. Breast milk contains, among others, immunological components such as immunoglobulins, leukocytes, and cytokines which possess anti-inflammatory and anti-allergic features that compensate for under-developed preterm infants' immune systems. It also has numerous commensal bacteria that inhibit pathogens, enhance infants' immune response, and contribute to overall development. Colostrum, a specific type of breast milk secreted in the early few days postpartum, has a significantly higher concentration of the aforementioned immunologically active components. Therefore, healthcare professionals need to work with mothers to establish milk supply early by initiating breast milk expression as soon as possible immediately after birth, which would also help lactogenesis in mothers. It is also necessary to properly manage the expressed breast milk by selecting appropriate storage methods. Different routes of choice for feeding are available for different groups of preterm infants. Late preterm infants might be able to be given nutrition enterally right after stabilization while extremely preterm infants might need exclusive parenteral nutrition. Mothers are also encouraged to perform skin-to-skin care for the infants. Depending on the infant's readiness to breastfeed, they might need to perform non-nutritive sucking directly at the mother's breast or consume breast milk via gastric tubes or supplementation line before they can consume milk directly from the mother's breast. In the hospital, healthcare professionals need to monitor the effectiveness of milk transfer through the infants' vital signs, weight changes, and stool/urine output. Before the infants are discharged, mothers and other caregivers need to be educated on proper monitoring of the breastfeeding process, recognizing several breastfeeding cues from the infants, and performing steps on breastfeeding sleepy infants. Doing appropriate follow-up of the infants using the Fenton Growth Chart and nurturing a supportive environment for breastfeeding mothers are key to maintaining adequate nutrition even after they return home.

Keyword: Preterm infants, breastfeeding, human breast milk, early nutrition

S13B: Evidence-Based TPN Prescription: How Best to Determine Nutrition Requirements

Yvonne Ng

This presentation examines approaches to parenteral nutrition (NICE, ESPHAGN, ASPEN, local guidelines) for preterm infants. Early PN initiation (within hours of birth) and initiation of enteral feeds is ideal strategy. There is a critical balance between achieving caloric targets, while minimizing inadvertent “harm” such as hyperglycemia, electrolyte imbalances and central line-associated infection. Successful TPN management requires harmonizing evidence-based targets with pragmatic risk-benefit decisions and adapting protocols to each unit’s resources.

SYMPOSIUM 14:

Gynaecological Conditions in Obstetrics

22nd June 2025, Sunday
Chairperson: Zaleha Mahdy

S14A: Caesarean Scar Ectopic
Jamiyah Hassan

S14B: Ovarian Cyst in Pregnancy – Remove, Or Not?
Voon Hian Yan

S14C: Value of Placental Examination – An Autopsy for Obstetricians
Piya Chamesaithong

S14A: Caesarean Scar Ectopic

Jamiyah Hassan

Caesarean scar ectopic pregnancy (CSEP) is a rare but increasingly recognized form of ectopic pregnancy, where the gestational sac implants within a previous caesarean section scar. With rising global caesarean delivery rates, the incidence of CSEP has grown, posing significant risks such as severe haemorrhage, uterine rupture, and placenta accreta spectrum (PAS) disorders.

Early diagnosis is crucial, with transvaginal ultrasound being the primary imaging modality, often supplemented by MRI for detailed assessment. Management strategies vary based on gestational age, implantation depth, and patient stability. Medical approaches, such as systemic or local methotrexate therapy, aim to halt trophoblastic growth, while surgical interventions, including hysteroscopic resection, laparoscopic excision, and uterine artery embolization, are considered in cases of significant invasion or bleeding.

Recent advancements emphasize individualized treatment plans, balancing fertility preservation with maternal safety.

S14B: Ovarian Cyst in Pregnancy – Remove, Or Not?

Voon Hian Yan

The incidence of adnexal masses in pregnancy is 2 to 20 times more common than women in the age-matched population. Although most adnexal masses including ovarian cysts can be safely observed as the majority of these lesions resolve, they can be difficult to manage when symptomatic or mimic malignancy sonographically.

With ultrasound as the mainstay of investigation and pregnancy having a confounding role on tumour markers, are there any risk scoring systems to guide clinicians? Which ovarian masses should be removed? What modifications to the surgical approach can minimize morbidity, whilst ensuring optimal outcomes?

S14C: Value of Placental Examination – An Autopsy for Obstetricians
Piya Chamesaithong

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FORUM

THE MOTHER, HER FETUS & THE SOCIETY: THE ETHICS OF SAVING PERIVIABLE BIRTHS (22 TO <26 WEEKS GA)

22nd June 2024, Sunday
Moderator: Jamiyah Hassan

Panelists:

- Roy Joseph
- Carol Lim Kar Koong
- Azanna Ahmad Kamar

ABSTRACTS FOR FREE PAPERS

Abstract ID: A-0003

Status:	Format of Presentation:	Abstract Category:	Format of Study:
Short-listed for Best Poster	Poster	Neonatal	Research Study

Abstract Title:

Factors Influencing Successful Breastfeeding among the Moderate and Late Preterms

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Abstract Text:

Introduction:
Optimal breastfeeding in newborns, particularly in preterm infants, reduces morbidity and mortality, and provides benefit both in the short and long-term prospect. Successful breastfeeding among mothers of preterm infants remains a challenge and requires a high-level of self-efficacy. This study aimed to determine factors associated with breastfeeding self-efficacy among mothers of moderate or late preterm infants, and the relationship between breastfeeding self-efficacy and successful breastfeeding at 3 months post hospital discharge.

Methodology:
A prospective observational study was conducted between 2022 and 2024, involving mothers who delivered a liveborn moderate or late preterm infant at Hospital Canselor Tuanku Muhriz, Kuala Lumpur. Breastfeeding Self-Efficacy Scale Short-Form (BSES-SF) and Breastfeeding Knowledge Questionnaire (BKQ) were used to determine the level of breastfeeding self-efficacy and knowledge of these mothers. Type of feeding at discharge and at 3 months post hospital discharge was collected to determine the rate of successful breastfeeding.

Results:
A total of 177 mother-infant dyads were enrolled. Majority (80.5%) had good knowledge regarding breastfeeding, but only 49.1% had high self-efficacy at hospital discharge. Factors that showed significant association with breastfeeding self-efficacy includes Malay ethnicity (OR 2.17, 95% CI 1.05 - 4.47, p = 0.04), parity (OR 3.28, 95% CI 1.74 - 6.16, p < 0.001) and previous breastfeeding experience (OR 3.11, 95% CI 1.66 - 5.85, p < 0.001). There was no significant association between level of breastfeeding knowledge and breastfeeding self-efficacy. A high level of breastfeeding self-efficacy was significantly associated with successful breastfeeding at 3 months post hospital discharge (OR 2.73, 95% CI 1.44 - 5.19, p = 0.002).

Conclusion:
High breastfeeding self-efficacy is significantly associated with exclusive breastfeeding at 3 months post discharge. Malay ethnicity, multiparity and previous breastfeeding experiences were significant factors contributing towards high self-efficacy. High level of breastfeeding knowledge is not a determinant of self-efficacy.

Keywords:

Self-efficacy, exclusive breastfeeding, preterm birth, knowledge, preterm infant

Abstract ID: A-0004

Status:	Format of Presentation:	Abstract Category:	Format of Study:
Accepted	Poster	Neonatal	Case Report

Abstract Title:

Povidone-Iodine Pleurodesis in Congenital Chylothorax: A Case Series

Authors & Institutions:

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Abstract Text:

Background:
Congenital chylothorax is a rare cause of neonatal respiratory distress, often requiring prolonged pleural drainage and nutritional management. Conservative approaches, including dietary modifications and somatostatin analogues, are first-line treatments. However, refractory cases may require invasive interventions. Povidone-iodine pleurodesis has emerged as a potential option in persistent chylothorax, but data on its efficacy and safety in neonates are limited.

Case Report:
We reviewed three cases of congenital chylothorax successfully managed with povidone-iodine pleurodesis at Hospital Umum Sarawak from 2022 to 2025. All patients were diagnosed postnatally and initially received conservative treatment, including medium-chain triglycerides (MCT) based feeding, total parenteral nutrition (TPN), and octreotide therapy. Due to persistent high-output chylous effusions, intrapleural povidone-iodine pleurodesis was performed.
Patient 1 was a 34-week non-syndromic preterm neonate with persistent bilateral chylothorax who underwent povidone-iodine pleurodesis on day 32 of life, achieving immediate resolution without recurrence or adverse effects.
Patient 2 was a 36-week preterm neonate with Down syndrome and persistent right-sided chylothorax who underwent povidone-iodine pleurodesis on day 24 of life, resulting in resolution within 48 hours without complications resulting from the procedure.
Patient 3 was a 34-week preterm neonate with Down syndrome and persistent bilateral chylothorax. Povidone-iodine pleurodesis was performed on day 19 of life. She required a second pleurodesis on the right-side due to suboptimal drain positioning during the first attempt after which full resolution was achieved. Thyroid function, which was mildly deranged prior to pleurodesis, showed significant worsening following the procedure, necessitating treatment for hypothyroidism. This remained the only notable complication observed.

Discussion:
Povidone-iodine pleurodesis appears to be a viable adjunct for refractory congenital chylothorax, offering a minimally-invasive alternative to surgery. While generally well tolerated, monitoring for hypothyroidism is essential. Further studies are needed to establish standardized protocols and assess long-term safety.

Keywords:

congenital chylothorax, iodine pleurodesis, neonatal respiratory distress, perinatal management

Abstract ID: A-0006

Status:	Format of Presentation:	Abstract Category:	Format of Study:
Accepted	Poster	Neonatal	Case Report

Abstract Title:

The Belly Button Clue: When the Umbilicus Speaks of the Gut

Authors & Institutions:

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Abstract Text:

Introduction:
The vitellointestinal duct (VID), also known as the omphalomesenteric duct, is an important embryologic structure that connects the developing midgut to the yolk sac during early foetal life. Typically, the VID undergoes complete involution by the 7th week of gestation. However, failure of this duct to regress can result in a patent vitellointestinal duct (PVID), which may lead to a range of gastrointestinal anomalies. We report a case of a newborn who presented with meconium discharge from the umbilical stump shortly after birth. Intraoperative findings confirmed a PVID with Meckel's diverticulum attached to the umbilicus.

Case Description:
A male baby was delivered at 36 weeks of gestation via spontaneous vaginal delivery, with good Apgar scores and a birth weight of 2.64 kg. Shortly after birth, the baby experienced transient respiratory distress, requiring CPAP but later stabilized and weaned to room air within 12 hours. Upon admission, meconium discharge from the umbilical stump was seen. Examination revealed a thickened umbilical cord with a wide base and pinkish mucosa at the base of the umbilical stump. The baby had not passed any meconium per rectum, though the anus was patent. He underwent surgical exploration, during which Meckel's diverticulum was found to be attached to the umbilical region. The patent vitellointestinal duct was excised, and primary bowel anastomosis was performed. Postoperatively, he recovered well and was discharged on day 9 of life.

Discussion:
Incomplete closure of the VID can lead to a variety of clinical presentations. Faecal discharge or bowel prolapse through the umbilicus is often pathognomonic for PVID. Surgical intervention is the definitive treatment, and early diagnosis is essential to avoid complications such as bowel obstruction. Although rare, umbilical abnormalities in neonates warrant thorough evaluation to ensure timely and effective management.

Keywords:

Umbilical anomalies, patent vitellointestinal duct, omphomesenteric duct, faecal discharge, meckel diverticulum

Abstract ID: A-0007

Status:	Format of Presentation:	Abstract Category:	Format of Study:
Accepted	Poster	Neonatal	Case Report

Abstract Title:

My Dancing Queen: Neonatal Intractable Myoclonus Associated KIF5A Gene Mutation

Authors & Institutions:

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Abstract Text:

Introduction:
The KIF5A gene encodes a neuron-specific kinesin heavy chain, essential for intracellular transport of mitochondria, proteins, and mRNA. Pathogenic mutations in KIF5A have been implicated in severe neonatal-onset intractable myoclonus (NEIMY), a rare disorder characterized by refractory myoclonus, hypotonia, respiratory failure, and neurodevelopmental impairment with universally poor outcomes.

Case description:
We present a novel KIF5A mutation in a neonate, expanding the clinical and genetic understanding of NEIMY. A term female infant, delivered via emergency caesarean section for foetal distress (Apgar scores 9/9), exhibited persistent myoclonic jerks and respiratory distress requiring nasal oxygen. From birth, she had persistent myoclonic jerks and was intubated at 17 hours of life for cerebral protection due to recurrent tonic-clonic seizures refractory to phenobarbitone and levetiracetam. EEG revealed stimulus-sensitive myoclonus without electrographic seizures. MRI showed diffuse leptomeningeal enhancement, however CSF analysis was normal. She was encephalopathic with bilateral ptosis, absent gag/rooting reflexes, hypotonia, and central hypoventilation, necessitating prolonged ventilation and nasogastric feeding. Whole-exome sequencing identified a novel heterozygous KIF5A frameshift mutation (c.2859del), predicted to cause nonsense-mediated decay or a truncated protein.

Conclusion:
This case aligns with prior report of KIF5A-related NEIMY phenotypes, including stimulus-sensitive myoclonus, severe hypotonia, and ventilator dependence. Prior cases described by Duis et al. (2016) and Rydzanicz et al. (2017) similarly demonstrated profound neurologic impairment and early mortality. This fourth global case of KIF5A-related NEIMY reinforces the gene's pathogenicity and the clinical uniformity of this lethal disorder. Early genetic testing is critical for neonates with refractory myoclonus. Given the absence of effective treatments, further research is needed to explore potential therapeutic targets.

Keywords:

KIF5A

Abstract ID: A-0008

Status:	Format of Presentation:	Abstract Category:	Format of Study:
Accepted	Poster	Neonatal	Case Report

Abstract Title:

Non-Ketotic Hyperglycinemia in Penan Neonates: A Case Series from Miri General Hospital

Authors & Institutions:

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Abstract Text:

Introduction:
Non-ketotic Hyperglycinaemia (NKH) is a rare autosomal recessive metabolic disorder caused by defects in the glycine cleavage system, leading to glycine accumulation in body tissues. Its global incidence ranges from 1:60000 to 1:100000 live births. In Malaysia, the reported prevalence is lower at 1:187500, although underdiagnosis particularly in rural populations is likely. The Penans, a semi-nomadic indigenous group in Borneo may have a higher incidence due to consanguinity and genetic isolation. This case series highlights three NKH neonates from the Penan community treated at Miri General Hospital.

Case Description:
Case 1 is a term female (birth weight 3kg), born to consanguineous parents (cousins twice removed). She developed encephalopathy and apnoea on day two of life with hypotonia and absent reflexes. CSF/plasma glycine ratio of 0.12 confirmed NKH. Despite supportive care, she succumbed to haemodynamic instability on day five; genetic testing was pending.

Case 2 is now a 1-year-7-month-old female (birth weight 3.81kg), presented at birth with respiratory distress, dysmorphism (narrow bifrontal diameter, talipes equinovarus) and seizures. Imaging showed intraventricular haemorrhage and hydrocephalus-findings atypical in NKH. Genetic testing confirmed a homozygous GLDC mutation (c.1952A>G). Sodium benzoate improved her respiratory status but she remains severely developmental delayed. Family history included unexplained infant deaths.

Case 3 is a 3-month-old male (birth weight 3.1kg) with cleft palate, hypotonia and apnea. MRI revealed corpus callosum dysgenesis and EEG showed burst suppression. His CSF/plasma glycine ratio was 0.13, plasma glycine was 1067umol/L. He was stabilised on dextromethorphan and sodium benzoate. Genetic analysis is ongoing.

Conclusion:
All three cases showed classical features of neonatal NKH. This cluster suggests a higher local incidence among Penan's, underscoring need to consider NKH in neonates with unexplained neurological symptoms, especially in the consanguineous population.

Keywords:

NKH, Penan neonates

Abstract ID: A-0009

Status:	Format of Presentation:	Abstract Category:	Format of Study:
Accepted	Poster	Neonatal	Research Study

Abstract Title:

Variation in Adoption of Infection Prevention and Control - Best Practices in Asian NICUs

Authors & Institutions:

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Abstract Text:

Introduction:
Healthcare-associated infections (HCAIs) account for a significant proportion of neonates who develop infections and sepsis. Reducing the incidence of HCAIs among neonates is a key step to reducing mortality and long-term morbidities, including the attendant long-term costs incurred to patients, families and society.

Report:
Here we report the results of a survey on the adoption of infection prevention and control (IPC) best practices in neonatal ICUs (NICUs) across Asia. The survey was developed through consensus discussion with working neonatologists and was targeted at neonatologists and paediatricians practising in Levels III and IV neonatal units. It covered a broad range of topics, namely: (1) neonate-specific care practices; (2) visitors and staff; (3) unit environment; (4) central line practices; and (5) audit and outbreak management. Across the 76 survey responses, there was generally high endorsement of most IPC practices. The greatest variation was among neonate-specific care practices, where country income group was positively associated with adoption of several items including use of fungal prophylaxis and probiotics. In addition, country income level was negatively associated with adoption of certain central line-related practices.

Discussion:
Our results suggest that resource availability and local practice and perceptions may affect adoption of IPC best practices. Further study is needed to understand specific barriers to adoption as well as central line-related variation in practice, and to define specific quality improvement initiatives to tackle these areas.

Keywords:

Infection control, neonatal, survey, NICU

Abstract ID: A-0010

Status:	Format of Presentation:	Abstract Category:	Format of Study:
Accepted	Poster	Neonatal	Case Report

Abstract Title:

When Parasites Cross the Placenta: A Case Series on Congenital Toxoplasmosis

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Abstract Text:

Background:
Congenital toxoplasmosis is a preventable congenital infection with significant neurological and ophthalmologic sequalae. Although rare, Tan DSK et al. (1985) has reported a seropositivity rate of 0.4% of congenital toxoplasmosis among Malaysian infants with congenital abnormalities. Hydrocephalus, intracranial calcifications, and chorioretinitis are the common clinical manifestations. Early recognition and prompt diagnosis with appropriate treatment affects prognosis.

Report:
We present three newborns diagnosed with congenital toxoplasmosis at a tertiary center in northern Malaysia. Case 1 involves a 34-week gestation premature infant with severe hydrocephalus and a positive cerebrospinal fluid PCR for *Toxoplasmosis gondii*. Despite early treatment, the infant succumbed at 3 months of age due to multiple complications such as refractory seizures and diabetes insipidus. Case 2, a term infant with antenatal detection of ventriculomegaly. Serology was positive for Toxoplasmosis IgM. Prompt treatment initiated with multidisciplinary team follow up. Case 3, also a term infant, with antenatal detection of maternal antibodies to Toxoplasmosis, developed obstructive hydrocephalus with intracranial calcifications, requiring both surgical intervention and anti-parasitic treatment. Both living cases had global developmental delay as a sequelae of congenital toxoplasmosis, reflecting the long-term neurodevelopmental impact of the infection.

Conclusion:
This case series highlights the heterogenicity in the manifestations and outcomes of congenital toxoplasmosis. All three infants had both ocular and intracranial involvement, reinforcing the importance of early neuroimaging and ophthalmologic evaluation. Treatment with pyrimethamine, sulfadiazine, and folinic acid was initiated in all cases. The observed outcomes underscore the need for routine antenatal screening, timely intervention, and multidisciplinary follow-up to improve long-term quality of life and thus reducing complications in affected infants

Keywords:

congenital Toxoplasmosis, newborns, neurodevelopment

Abstract ID: A-0011

Status:	Format of Presentation:	Abstract Category:	Format of Study:
Accepted	Poster	Neonatal	Case Report

Abstract Title:

Neonatal Recessive Dystrophic Epidermolysis Bullosa with Cutis Aplasia Congenita: Identification of Two Novel COL7A1 Mutations

Authors & Institutions:

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Abstract Text:

Background:
Epidermolysis Bullosa (EB) encompasses a rare spectrum of genetically inherited connective tissue disorders characterized by extreme cutaneous fragility and blistering following minimal mechanical stress. Dystrophic EB (DEB), a major subtype, arises from mutations in the *COL7A1* gene, which encodes type VII collagen, a key component of anchoring fibrils that mediate dermal-epidermal cohesion. The recessive form, Recessive DEB (RDEB), is among one of the most severe phenotypes, often associated with life-threatening complications and profound morbidity.

Case Report:
We present a full-term female neonate (birth weight: 2.43 kg) who was admitted to the NICU within the first hour of life due to congenital absence of skin over the left lower extremity. Additional bullous and erosive lesions were identified on the left fifth digit, dorsum of right foot, abdomen, bilateral gluteal region and back. The infant was born to non-consanguineous parents, with no reported familial history of genetic or dermatologic disorders. During the initial postnatal period, new lesions, including oral mucosa blistering, developed. Supportive care involved emollients, non-adhesive dressings, and careful handling to minimize further trauma.
Molecular analysis identified two novel heterozygous pathogenic variants in the COL7A1 gene (c.2858_2859del and c.4943del), both predicted to result in frameshift mutations and truncated type VII collagen. These findings confirmed a diagnosis of RDEB and expand the mutational spectrum of COL7A1.

Conclusion:
This case underscores the phenotypic and genotypic heterogeneity of *COL7A1*-related EB and emphasizes diagnostic value of early genetic testing. The co-occurrence of cutis aplasia congenita is indicative of a severe phenotype. Given the high risk of complications – including squamous cell carcinoma, contractures, mucosal strictures, impaired growth, and ocular involvement – timely molecular confirmation and coordinated multidisciplinary management are essential to optimizing long-term outcomes and quality of life.

Keywords:

COL7A1 gene, recessive Dystrophic EB

Abstract ID: A-0012

Status:	Format of Presentation:	Abstract Category:	Format of Study:
Accepted	Poster	Neonatal	Case Report

Abstract Title:

Brittle Start: A Case Report of Type VIII Osteogenesis Imperfecta Neonate with Novel P3H1 Mutation

Authors & Institutions:

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Abstract Text:

Introduction:
Type VIII Osteogenesis imperfecta (OI) is a rare autosomal recessive skeletal dysplasia with heterogenous phenotypes, ranging from white sclerae and bone fragility to perinatal lethality. It is most commonly associated with mutations in the *P3H1* gene, which encodes a component of the prolyl-3-hydroxylation complex essential for collagen folding and stability via hydroxylation of proline residues in type I collagen.

Case Report:
We report the case of a term neonate with type VIII OI, initially admitted to the neonatal intensive care unit (NICU) for non-invasive ventilatory support for congenital pneumonia. She was born to non-consanguineous parents, and antenatal imaging revealed features including a cloverleaf skull, frontal bossing, and shortened long bones. Postnatally, she appeared dysmorphic with limb deformities and sustained multiple fractures of varying ages involving the skull, vertebrae, ribs and long bones.

Laboratory investigations revealed severe Vitamin D deficiency (8 nmol/L), and she was commenced on alfacalcidol (titrated up to 0.3mcg/kg/dose) and calcium carbonate (40mg/kg/day). Genetic testing confirmed a diagnosis of type VIII OI, revealing compound heterozygous mutations in *P3H1*: c.1170+5G>C (intronic) and a novel variant, c.916del (p.Tyr306Ilefs*31), which has not been previously reported in population databases. Genetic counselling was provided to the family regarding the nature, inheritance and prognosis of the condition. The infant was discharged on day 23 of life after her parents were trained in appropriate home-based care.

This case highlights the clinical and genetic heterogeneity of type VIII OI and highlights the importance of multidisciplinary management. Further studies are warranted to expand the *P3H1* mutation spectrum and its correlation with disease severity and outcomes.

Keywords:

Osteogenesis Imperfecta, pathological fracture, genetic testing, recessive genetic conditions, P3H1 mutation

Abstract ID: A-0013

Status:	Format of Presentation:	Abstract Category:	Format of Study:
Accepted	Poster	Neonatal	Case Report

Abstract Title:

Developmental Lactase Deficiency: A Forgotten Culprit Behind Preterm Infants with Feeding Intolerance

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Abstract Text:

Background:
Lactose is a major carbohydrate and energy source in mammalian milk, requiring lactase for absorption. Lactase activity is depending on intestinal maturity and is often reduced in preterm infants less than 34 weeks gestation, which may cause lactose intolerance. Relative lactase deficiency observed in preterm infants is known as developmental lactase deficiency.

Case Report:
We report three cases of preterm infants with feeding intolerance who developed vomiting, increased gastric aspirates, and abdominal distension in the early days of life following the introduction of lactose-containing milk. Septic work-up for all three infants were negative. Symptoms persisted despite changing to slow, intermittent bolus feeds. However, all infants showed clinical improvement after switching to a lactose-free formula.

As there is no definitive diagnostic test for developmental lactase deficiency, the condition is often overlooked in preterm infants presenting with feeding intolerance. This can lead to unnecessary fasting, antibiotic use, prolonged total parenteral nutrition, and delays in achieving full enteral feeds. Additionally, empiric antibiotic coverage for presumed sepsis may disrupt the developing gut microbiota, with potential long-term consequences. Delayed diagnosis may also result in repeated abdominal radiographs for unresolved distension, thereby exposing infants to unnecessary radiation.
Reducing the lactose load in each feed remains the cornerstone of treatment for developmental lactase deficiency.

Conclusion:
High index of suspicion is needed to diagnose developmental lactase deficiency early in preterm infants with feeding intolerance to avoid unnecessary and potentially harmful investigations and treatment. There is an urgent need to develop reliable diagnostic methods to identify developmental lactase deficiency for preterm infants in the near future.

Keywords:

Developmental lactase deficiency, lactase activity, lactose intolerance, lactose free formula

Abstract ID: A-0014

Status:	Format of Presentation:	Abstract Category:	Format of Study:
Accepted	Poster	Neonatal	Case Report

Abstract Title:

A Silent Bleed: Neonatal Subpial Haemorrhage

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Abstract Text:

Background:
Subpial haemorrhage (SPH) is a rare intracranial bleed occurring between the pia mater and cerebral cortex. It remains under-recognised due to its subtle clinical presentation and unclear pathophysiology. Symptoms may include seizures, respiratory distress, or nonspecific neurologic signs. We report a case of neonatal SPH highlighting characteristic imaging findings, potential prenatal aetiology, and a favourable outcome with conservative management.

Case Report:
A late preterm male infant (36 weeks' gestation, 1.88 kg) was delivered via emergency caesarean section for foetal distress. Postnatally, he developed respiratory distress requiring intubation. Ophthalmologic examination revealed rubeosis iridis, suggestive of chronic intrauterine hypoxia. Initial laboratory investigations showed anaemia (Hb: 9 g/dL), thrombocytopenia (74 × 10^9/L), and coagulopathy, all of which resolved after transfusion. Cranial ultrasonography and MRI revealed a large right temporal subpial haemorrhage (4.4 × 4.9 × 5.5 cm) associated with cortical infarction, midline shift, and obstructive hydrocephalus. Focal seizures developed at 84 hours of life and was controlled with phenobarbitone. Neurosurgical intervention was declined by the parents, and conservative management was pursued. The infant showed steady recovery and achieved age-appropriate developmental milestones at six months follow-up.

Conclusion:
Subpial haemorrhage remains a diagnostic challenge in neonates, with MRI being essential. In this case, the MRI findings of a well-demarcated ellipsoid haemorrhage with adjacent cortical infarction were key to establishing the diagnosis. While previously associated with birth trauma, this case suggests a prenatal origin, supported by signs of chronic hypoxia and an uncomplicated delivery. The outcome spectrum in SPH is highly variable, ranging from severe neurological sequelae to full recovery. Our case demonstrates that, in selected patients, conservative management may result in a favourable prognosis. Early recognition and individualized management strategies are essential. Further research is needed to delineate risk factors, refine diagnostic criteria, and guide treatment approaches

Keywords:

Neonatal subpial haemorrhage, neonatal neurology, neonatal MRI, neonatal neuroimaging, neonatal intensive care, neonatal intracranial bleed

Abstract ID: A-0015

Status:	Format of Presentation:	Abstract Category:	Format of Study:
Accepted	Poster	Neonatal	Case Report

Abstract Title:

Tiny and Tachycardic: Neonatal Thyrotoxicosis in a Preterm Infant

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Abstract Text:

Introduction:
Neonatal thyrotoxicosis is rare compared to congenital hypothyroidism but can result in serious morbidity and mortality if unrecognized. We present a case of neonatal thyrotoxicosis in a preterm infant, initially masked by features of prematurity, emphasizing the importance of clinical vigilance and early intervention.

Case Description:
A preterm female infant was delivered at 31 weeks and 5 days via emergency Caesarean section for foetal distress. The
26-year-old primigravida mother had diet-controlled gestational diabetes, presented with foul-smelling liquor and maternal tachycardia, and was treated for chorioamnionitis. Baby required intubation for respiratory distress and was extubated on day 9 of life.

Tachycardia during the first week of life was initially attributed to prematurity. However, cord blood and day 5 thyroid function tests revealed TSH <0.01, free T4 37.16 and 38.89, respectively. Clinically, the infant appeared small for gestational age with poor muscle bulk, jitteriness, and inadequate weight gain despite optimized caloric intake.

Further maternal history indicated symptoms suggestive of hyperthyroidism, including palpitations and neck swelling during pregnancy. Maternal testing confirmed positive anti-TPO antibodies, suggesting autoimmune thyroid disease.

Neonatal thyrotoxicosis was diagnosed, and the infant was started on Carbimazole and Propranolol on day 12. Clinical improvement followed, along with stabilization of thyroid function. Antithyroid medications were discontinued by day 63. The infant later developed transient hypothyroidism, for which Levothyroxine was initiated and discontinued at 5 months after thyroid levels normalized.

Discussion:
This case underscores the importance of clinical vigilance, as symptoms of neonatal thyrotoxicosis can mimic prematurity. Persistent tachycardia, poor weight gain, and jitteriness should prompt early and repeated thyroid function testing. Thorough maternal history and targeted thyroid screening are essential, particularly in symptomatic mothers. Timely initiation and careful titration of antithyroid therapy, guided by clinical and biochemical monitoring, can result in favourable outcomes.

Keywords:

Neonatal; Thyrotoxicosis; Hyperthyroidism

Abstract ID: A-0016

Status:	Format of Presentation:	Abstract Category:	Format of Study:
Accepted	Poster	Neonatal	Case Report

Abstract Title:

The Invisible Threat: Diagnosing Postnatally Acquired Neonatal Smear Positive Pulmonary Tuberculosis in an Asymptomatic Household - A Case Report

authors & institutions:

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Abstract Text:

Introduction
Postnatally acquired neonatal tuberculosis (TB) is a rare but serious condition caused by horizontal transmission of *Mycobacterium tuberculosis* (MTB) after birth. Neonates are vulnerable due to their immature immune system, and often present with nonspecific symptoms, mimicking other neonatal infections I.e. sepsis or pneumonia, making diagnosis challenging.

Case Description
A BCG-vaccinated baby girl who was born at 36 weeks gestation with birthweight of 3kg, presented at day 20 of life with fever, breathlessness and slow weight gain. She was in respiratory failure which required intubation and ventilation. Systemic examinations were otherwise normal. Chest radiographs showed generalised persistent reticulonodular changes. Acid-fast bacilli was detected in tracheal aspirate samples. Mycobacterium gene Xpert detected MTB complex without Rifampicin resistance. Growth resembling *Mycobacterium tuberculosis* morphologically detected from MTB culture. Cerebrospinal fluid tests and HIV screening were all normal. 4 drug anti-TB regimen was commenced on day 4 of admission. Improvement was observed clinically after 10 days of starting treatment.

Maternal grandfather passed away in April 2024 due to smear positive PTB and TB laryngitis. Family screening following the death was all negative. Mother conceived in June 2024 and was well throughout pregnancy. Following the baby's diagnosis, family members were re-screened and found to be negative, except for the maternal great-grandmother, who had an abnormal chest X-ray and was referred to a chest physician for further evaluation.

Case Discussion
Baby has severe respiratory disease with negative results from standard workup, i.e. QIASTAT and culture, hence, prompting investigations for PTB. Smear positivity is rare due to the paucibacillary nature of childhood TB.

Conclusion
Postnatally acquired neonatal PTB, though rare, should be considered in neonates presenting with respiratory distress and poor weight gain, especially if there is significant TB contact. High index of suspicion is crucial in early diagnosis, timely treatment, and eventually improving outcomes, as highlighted in this case report.

Keywords:

Neonate, smear positive pulmonary tuberculosis, diagnosis, treatment, contact screening

Abstract ID: A-0017

Status:	Format of Presentation:	Abstract Category:	Format of Study:
Accepted	Poster	Neonatal	Case Report

Abstract Title:

From Fright to Relief: The Journey of a Congenital Hepatic Haemangioma

Authors & Institutions:

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Abstract Text:

Introduction:
Haemangiomas are benign vascular neoplasms that involve the skin and visceral organs with the liver being the second most involved after skin. Congenital hepatic haemangioma is rare, mostly fully formed at birth and involutes during infancy period which contrasts with infantile haemangioma.

Case report:
We report a case of congenital hepatic haemangioma in a 36-week baby boy. He was intubated after birth due to respiratory distress with distended abdomen. Abdominal ultrasound revealed a heterogeneous cystic mass measuring 4.6 x 5.3 x 6.2 cm with internal vascularity. The baby has thrombocytopenia which normalized by 2 weeks of age and an elevated serum alpha-fetoprotein levels (107,519 IU/ml) which subsequently show a declining trend. Due to the large congenital hepatic haemangioma with intratumorally arteriovenous portovenous shunts seen in subsequent serial ultrasonography, he developed high-output cardiac failure by the second week of life and was effectively managed with two anti-failure medications. He was managed conservatively, and serial follow-up of abdominal ultrasounds demonstrated a reduction in the size of the mass.

Discussion:
In our case, the patient has rapid involuting congenital haemangioma. Large congenital haemangioma is associated with high output cardiac failure, pulmonary hypertension, thrombocytopenia with deranged coagulation profile and abdominal compartment syndrome. Serial ultrasonography of the mass will show reduction in size and increasing intratumorally calcifications which coincides with involution as seen in our patient. The mainstay of treatment will be conservative. Awareness and correct identification of congenital hepatic haemangioma can prevent invasive testing and treatment of an otherwise benign condition.

Keywords:

congenital haemangioma

Abstract ID: A-0018

Status:	Format of Presentation:	Abstract Category:	Format of Study:
Accepted	Poster	Neonatal	Research Study

Abstract Title:

Hypothyroidism in Premature Infants: Relationship with Gestational Age and the Need for Increased Monitoring - A Retrospective Cohort Study

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Abstract Text:

Background
Congenital hypothyroidism (CH) is a common endocrine disorder present at birth and a preventable cause of intellectual disability. “Hypothyroidism of prematurity” occurs more frequently in preterm neonates, causing delayed thyroid-stimulating hormone (TSH) surge, leading to a smaller increase in T4 levels. In Malaysia, guidelines recommend repeating TFT two weeks after the first cord TSH or TFT, then every two weeks until discharge, and two weeks post-discharge for preterm neonates.

Objective
To investigate the relationship between hypothyroidism in extremely preterm (EP) , very preterm (VP), moderate preterm (MP) and late preterm (LP).

To assess the need to repeat TFT 2-weekly in preterm infants.

Methods
This retrospective cohort study reviewed 447 preterm births from the HTAR NICU admissions (1st July 2023-30th June 2024). These neonates are further analysed according to their gestational age group and respective T4 levels.

Result
Out of 447 premature neonates, 5 were excluded due to Down syndrome/dysmorphism, leaving 442 infants. Further analysis done for the repeated T4 level in each week of life.

Analysis of T4 levels by week revealed the highest percentage of hypothyroidism is found in weeks 2 and 3 of life across all groups, with lower percent subsequently in week 4, 5, 6 and more than 6 weeks. Testing for correlation shows negative correlation in the group EP (p=0.035), VP (p=0.050) ,MP (p=0.042) and LP (p=0.026).

Conclusion
The percentage of hypothyroidism decreases with maturity across all groups. Therefore, it may be beneficial to perform a repeat TFT at 2 weeks of age, with the possibility of extending the testing intervals after the 4th week of life. However, the number of patients in each group varies, and the relatively small sample size may act as a confounding factor. Future research should involve larger-scale prospective studies across multiple centers.

Keywords:

Hypothyroidism, premature infants

Abstract ID: A-0019

Status:	Format of Presentation:	Abstract Category:	Format of Study:
Short-listed for Best Oral	Oral	Obstetrics	Research Study

Abstract Title:

Preventing Adolescent Pregnancy: An Imperative for Improving Perinatal Outcomes

Authors & Institutions:

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Abstract Text:

Background:
Adolescent pregnancy is a critical yet under-addressed public health issue in Malaysia, with significant implications for perinatal outcomes. Early childbearing heightens the risk of obstetric complications, neonatal morbidity, and mortality, and entrenches intergenerational cycles of poor health and socioeconomic disadvantage. Despite Malaysia's commitments to the Sustainable Development Goals (SDGs), including targets related to maternal health (SDG 3), gender equality (SDG 5), and child well-being (SDG 16), legal and policy gaps continue to undermine effective prevention.

Objectives:
This study evaluates Malaysia's legal and policy landscape in relation to adolescent pregnancy prevention. It aims to assess the alignment of existing frameworks with international human rights standards and SDG benchmarks and to identify systemic gaps that hinder progress toward improved perinatal health.

Methods:
A qualitative desk review was conducted, examining national legislation, policy frameworks, and sexual and reproductive health (SRH) programs in Malaysia. Comparative analysis was performed using legal developments from regional counterparts (e.g., Thailand and the Philippines) and global guidelines from WHO and UNFPA to identify gaps and evidence-based strategies.

Results:
Malaysia lacks a dedicated, cohesive legal framework to prevent adolescent pregnancy. Current laws are fragmented and often restrictive: adolescents face legal and procedural barriers to accessing SRH services, including the need for parental consent. The legal age of sexual consent lacks close-in-age exemptions, and minimum marriage ages remain inconsistent across jurisdictions. Comprehensive sexuality education is not uniformly mandated nor sufficiently inclusive. These deficits collectively hinder Malaysia's ability to prevent adolescent pregnancies and improve perinatal health outcomes.

Conclusions:
Preventing adolescent pregnancy is both a public health priority and an ethical imperative for protecting maternal and neonatal health. Legal and policy reforms focused on adolescent rights, healthcare access, and education are crucial to empower youth, reduce high-risk pregnancies, and advance Malaysia's progress toward the SDGs.

Keywords:

Adolescent pregnancy; Adolescent health; Pregnancy prevention; Sustainable development goals

Abstract ID: A-0020

Status:	Format of Presentation:	Abstract Category:	Format of Study:
Accepted	Poster	Neonatal	Case Report

Abstract Title:

Neonatal Presentation of Reticulated Capillary Malformation: A Case Report on Possible Klippel-Trenaunay Syndrome and Diagnostic Considerations

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Abstract Text:

Introduction:
Klippel-Trenaunay Syndrome (KTS) is a rare congenital vascular disorder characterized by capillary malformation, venous malformation, and limb overgrowth. Neonatal presentations can be subtle and often mimic other conditions, making early recognition crucial for appropriate management.

Case report:
This case report describes a neonatal presentation with vascular skin lesions and respiratory distress, initially raising suspicion for KTS, and emphasizes the importance of differential diagnosis and dermatology consultation.A term Malay neonate was admitted to the NICU at birth due to meconium-stained amniotic fluid and respiratory distress, requiring non-invasive ventilation and later intubation. Examination revealed multiple blanchable purplish lesions on the left lower limb extending to the buttocks, suggesting a vascular malformation. There was no limb asymmetry or overgrowth, and the TORCHES screen was negative.

Clinical evaluation showed no evidence of soft tissue hypertrophy, and the lesions were consistent with capillary malformations. This raised concern for KTS. Dermatology consultation confirmed reticulated capillary malformations, with a provisional diagnosis of possible KTS.

Conclusion:
This case highlights the importance of a structured diagnostic approach when evaluating neonatal vascular skin lesions. While KTS typically involves limb overgrowth, capillary malformations can be an early sign. Timely dermatology referral and investigation are key to accurate diagnosis and appropriate management.

Keywords:

Klippel-Trenaunay Syndrome, capillary malformation, neonatal case, vascular lesion, limb discoloration

Abstract ID: A-0021

Status:	Format of Presentation:	Abstract Category:	Format of Study:
Accepted	Poster	Neonatal	Case Report

Abstract Title:

Bladder Exstrophy-Epispadias Complex in a Newborn: A Case Report

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Abstract Text:

Introduction:
The bladder exstrophy–epispadias complex (BEEC) is a rare congenital anomaly with a global prevalence of approximately 3 to 5 per 100,000 live births. We report a case of antenatally undiagnosed BEEC, emphasizing postnatal management in a setting where definitive surgical repair is not planned in the immediate period.

Case Description:
A male neonate was born at 36 weeks and 3 days to a Rohingya mother with gestational diabetes managed by diet. The baby was born before arrival (BBA) and transported to the hospital after birth.

Examination revealed an exposed, everted bladder draining urine below the umbilical stump, with a dorsally opened urethral plate extending from the bladder neck to the glans. The corpora cavernosa was visible alongside the urethral plate. The scrotum was well formed, with the right testis descended and the left palpable in the inguinal region. Other systemic examinations were unremarkable.

The infant was treated empirically for presumed sepsis with a 5-day course of intravenous penicillin and gentamicin. Renal ultrasound showed no structural anomalies. He remained stable, with normal urine and stool output. The exposed bladder mucosa was protected using sterile dressings, and parents were trained in daily wound care.

Following consultation with the Paediatric Surgery team, definitive surgical repair is planned when the infant is older. The baby was discharged with outpatient follow-up once parents were confident with home care.

Discussion:
Bladder exstrophy is a rare congenital anomaly, and clinicians may be unfamiliar with its immediate postnatal management, particularly in settings where surgical expertise is limited or delayed. While the literature largely focuses on surgical correction, there is comparatively less emphasis on the initial medical and supportive care required in the neonatal period. This case highlights postnatal management, including protection of exposed bladder mucosa, infection prevention, relevant investigations, and guidance on monitoring and follow-up.

Keywords:

Bladder, exstrophy, epispadias, neonate, congenital

Abstract ID: A-0022

Status:	Format of Presentation:	Abstract Category:	Format of Study:
Accepted	Poster	Neonatal	Case Report

Abstract Title:

Hypoxic-Ischaemic Encephalopathy, Perinatal Stroke or both? - A Case Report

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Abstract Text:

Background
Perinatal stroke is a focal cerebrovascular event—either infarction or haemorrhage—occurring between 28 weeks of gestation and 28 postnatal days. Perinatal stroke commonly manifests with seizures within the first 72 hours of life, while hypoxic-ischaemic encephalopathy (HIE) typically presents at birth with signs of encephalopathy, such as hypotonia, diminished primitive reflexes and seizures. Despite differing timelines and presentations, the overlapping clinical features and risk factors of these two entities often lead to diagnostic uncertainty.

Case Report:
We present a case of perinatal stroke which was initially treated as HIE. A baby boy was born full term with a birth weight of 2770g by emergency lower segment caesarean section (EMLSCS) for non-reassuring foetal status. The mother presented in labour and had thick meconium-stained liquor. The patient was born with a poor Apgar score and respiratory distress requiring intubation and mechanical ventilation at birth. The patient did not fulfil criteria for cooling therapy until he developed a focal seizure at 7 hours of life. Subsequently, therapeutic hypothermia therapy was initiated with the diagnosis of neonatal encephalopathy. Amplitude-integrated electroencephalogram (aEEG) revealed burst suppression pattern. A magnetic resonance imaging (MRI) of the brain performed on day 10 demonstrated a subacute infarct in the left posterior cerebral artery territory, with a haemorrhagic component in the left occipital lobe and signs of early hydrocephalus. Additional punctate diffusion restrictions suggested multifocal involvement. Thrombophilia screen and echocardiogram were unremarkable. The patient has shown normal neurodevelopment to date with no recurrence of seizures.

Discussion:
The pathophysiology of perinatal stroke is similar to HIE which may lead to similar presentation at birth. Due to the difficulty in differentiating these two diseases, initiating therapeutic hypothermia for HIE is appropriate in this case. Utilisation of scoring tools may aid objective interpretation of MRI findings and prognostication of HIE.

Keywords:

perinatal stroke, hypoxic-ischaemic encephalopathy, neonatal encephalopathy, therapeutic hypothermia

Abstract ID: A-0023

Status:	Format of Presentation:	Abstract Category:	Format of Study:
Accepted	Poster	Neonatal	Case Report

Abstract Title:

A Case Report of Nonimmune Hydrops Fetalis Secondary to Noonan Syndrome

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Abstract Text:

Introduction:
Nonimmune(NIHF) accounts for approximately 90% of all hydrops cases and remains a significant diagnostic challenge in neonatal care. NIHF can result from a wide array of underlying conditions and due to its diverse aetiologies, establishing a definitive diagnosis requires a comprehensive evaluation. We report a rare case of NIHF secondary to Noonan syndrome.

Case Report:
A female infant was delivered macrosomic with birth weight of 3.2kg at 34 weeks of gestation via emergency lower segment Caesarean section due to foetal distress. The mother, a 34-year-old para 3, had been diagnosed with polyhydramnios and foetal bilateral pleural effusions at 32 weeks. Antenatal amniocentesis (chromosomal microarray analysis) revealed a 2.48 Mb chromosomal deletion at 3p26.3, classified as a variant of uncertain significance.

She exhibited several dysmorphic features, including a webbed neck, micrognathia, widely spaced nipples, generalized skin oedema and bilateral pleural effusions. Echocardiography revealed mild proximal left pulmonary stenosis. Other diagnostic investigations, including full blood count, haemoglobin analysis, metabolic screening and TORCHES infections panel failed to determine the aetiology of the hydrops. However, whole genome sequencing later identified a pathogenic variant in the *PTPN11* gene, confirming a diagnosis of Noonan syndrome.

During her prolonged NICU stay, she required multiple thoracocentesis for pleural effusions, prolonged mechanical ventilation due to upper airway obstruction and treatment for recurrent pneumonia. Other complications include laryngomalacia, bronchomalacia, and faltering growth. Despite a stormy clinical course requiring multidisciplinary care, she was eventually discharged at five months of age with home continuous positive airway pressure (CPAP) support.

Discussion:
This case highlights an atypical presentation of Noonan syndrome characterized by nonimmune hydrops fetalis. Postnatal evaluation and confirmatory genetic testing are imperative, particularly in cases where antenatal amniocentesis results are inconclusive, to establish an accurate diagnosis and guide further management.

Keywords:

Nonimmune hydrops fetalis, Noonan syndrome, Neonate

Abstract ID: A-0024

Status:	Format of Presentation:	Abstract Category:	Format of Study:
Accepted	Poster	Neonatal	Case Report

Abstract Title:

Intracranial Haemorrhage in Neonate with Severe Haemophilia A

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Abstract Text:

Introduction:
Haemophilia A is an X-linked recessive bleeding disorder characterized by a deficiency of coagulation factor VIII. Neonatal presentation is rare but they can present with intracranial haemorrhage which associated with high mortality and neurological sequelae. We illustrate a case of severe haemophilia A in a neonate who developed bilateral spontaneous cephalohematoma and acute subdural haemorrhage following uncomplicated delivery.

Case Description:
A male neonate with birth weight 3kg, born at 40 weeks via spontaneous vaginal delivery, presented at 20 hours of life with progressive scalp swelling in the postnatal ward. Antenatal and intrapartum were uneventful. Intramuscular Vitamin K was administered at birth. On examination, he was active, well-perfused, normotensive, and not tachycardic. Bilateral scalp swelling was noted at the temporal region consistent with cephalohematoma, measuring 7cm × 8 cm and 5cm × 5 cm respectively. There was no swelling over the injection site. Neurological examination was unremarkable, anterior fontanelle was normotensive and both pupils were equal and reactive. There was no family history of haemophilia. Laboratory investigations revealed a markedly prolonged activated partial thromboplastin time (aPTT) 110s, prompted an evaluation for haemophilia that revealed FVIII activity of 1%. He received multiple transfusions of fresh frozen plasma and packed red blood cells. However, the scalp swelling progressively became larger with significant drop in haemoglobin. Computed tomography brain on Day 7 of life revealed acute subdural haemorrhage. Treatment with factor VIII replacement was initiated, leading to clinical improvement. Prophylactic weekly factor VIII was started but discontinued after detection of inhibitors (inhibitor level 5 BU) on day 26 of exposure.

Conclusion:
Early recognition and prompt initiation of factor VIII replacement are critical to minimizing morbidity, mortality and improving long term outcomes.

Keywords:

Haemophilia A, intracranial haemorrhage, factor VIII

Abstract ID: A-0025

Status:	Format of Presentation:	Abstract Category:	Format of Study:
Accepted	Poster	Neonatal	Case Report

Abstract Title:

From Maternal Diagnosis to Neonatal Insight: A Case of Silent Hypocalcaemia in the Newborn

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Abstract Text:

Introduction
Neonatal hypocalcaemia is a metabolic disturbance that may be asymptomatic or present with signs such as seizures, jitteriness, or tetany. It is classified based on onset, with early-onset hypocalcaemia occurring within the first 72 hours of life. Common causes include prematurity, perinatal asphyxia, and maternal diabetes. A rare recognised cause is maternal hyperparathyroidism. In this condition, elevated maternal calcium levels suppress foetal parathyroid function in utero. After birth, sudden withdrawal of maternal calcium affects the neonate's impaired parathyroid response, resulting in hypocalcaemia. This can be clinically silent, making targeted screening in high-risk neonates essential.

Case Description
We present a case of asymptomatic early-onset severe neonatal hypocalcaemia identified following postpartum diagnosis of maternal hyperparathyroidism.
A term baby girl was delivered at 38 weeks 2 days via emergency Caesarean section. She was admitted to our Special Care Nursery for transient tachypnoea of newborn. On day 4 of life, we were notified that her mother was newly diagnosed with hyperparathyroidism postpartum. Following that, screening was done and the baby was found to be hypocalcaemic, with the lowest ionised calcium recorded at 0.55mmol/L. Multiple corrections were required and she remained asymptomatic. Case was co-managed with Paediatric Endocrinologist – calcium supplementation was optimised accordingly.

Discussion
This case emphasises the need to consider maternal hyperparathyroidism in cases of neonatal hypocalcaemia and at times, it may be the only clue. Awareness among healthcare, proactive screening and early involvement of endocrinologist are essential to avoid potential complications. Multidisciplinary coordination is key, and routine calcium screening may aid in detecting maternal endocrine disorders earlier, improving outcomes for both mother and child.

Keywords:

perinatal hyperparathyroidism, neonatal hypocalcaemia

Abstract ID: A-0026

Status:	Format of Presentation:	Abstract Category:	Format of Study:
Short-listed for Best Oral	Oral	Obstetrics	Research Study

Abstract Title:

Investigating the role of ABCA9 in placental lipid metabolism

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Abstract Text:

Background:
Placental ATP binding cassette (ABC) transporters regulate transfer of substances such as nutrients (e.g. lipids) and steroid hormones between mother and child. Several ABC transporters show gestational-age dependent expression, suggesting they play a critical role in supporting a healthy pregnancy. A recent study implicated decreased placental ABCA9 expression and altered placental lipidome in pregnancies affected by high maternal mental stress, which associates with adverse offspring neurodevelopmental outcomes. We hypothesised that reduced placental ABCA9 expression contributes to dysregulated placental lipid metabolism.

Objectives:
To determine ABCA9 localisation in the placenta and to investigate the role of ABCA9 in placental lipid metabolism.

Methods:
Immunofluorescence of placental sections from n=3 healthy term elective caesarean sections were used to determine ABCA9 protein localisation. BeWo cells were utilised as a model of placental trophoblast cells and transfected with siRNA for 48 hours to knockdown ABCA9 expression (n=4). Following validation of gene knockdown by qPCR, placental lipid profiles were determined by liquid chromatography mass spectrometry (n=4). Student's t-test was used to determine differences. Significance was considered at $p<0.05$.

Results:
ABAC9 primarily localised to trophoblast cells in the placenta. ABCA9 siRNA reduced placental ABCA9 mRNA expression by 81% relative to the negative control. There was no overall difference in the total abundance in each of the 22 detected lipid classes. However, at the individual lipid level, we observed specific decreases in three triacylglycerols [TG; TG 54:6-(20:5), TG 54:6-(22:6), TG 56:6-(20:4)], and one lysophosphatidylcholine (LPC; LPC 22:1), and an increased abundance of one sphingomyelin (SM; SM 40:0).

Conclusions:
Reduced ABCA9 transporter expression alters placental lipids, particularly polyunsaturated fatty acid (PUFA)-containing TG and lipids involved in cell membrane function. Lower circulating levels of PUFA are known to associate with maternal mental stress, and reduced placental ABCA9 in this condition may further exacerbate foetal PUFA insufficiency with potential implications for neurodevelopment.

Keywords:

Placenta, maternal mental health, lipid metabolism

Abstract ID: A-0027

Status:	Format of Presentation:	Abstract Category:	Format of Study:
Short-listed for Best Oral	Oral	Obstetrics	Research Study

Abstract Title:

Greater adherence to a vege-fruit-nut dietary pattern and higher pregnancy plasma vitamins B2 and B6 associate with reduced risk of preterm delivery

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Abstract Text:

Background: Epidemiological studies associate maternal diets rich in vegetables and fruits with lower spontaneous-onset of preterm birth (sPTB) risk. The NiPPeR trial previously reported that a preconception-pregnancy intervention supplement containing myo-inositol, probiotics, and micronutrients reduced sPTB as a prespecified secondary outcome, compared with a standard micronutrient supplement (control).

Objectives: To identify the key components of a healthy diet and the NiPPeR intervention that influence sPTB risk.

Methods: The multi-centred (UK, Singapore, NZ) NiPPeR double-blind RCT had data from 585 singleton pregnancies for this sub-study. Our combined outcome of interest was preterm prelabour rupture of membranes (PPROM) and sPTB. Concentrations of myo-inositol and vitamins (B2, B6, B12, D) were batch-quantified in plasma collected at preconception (before and after supplementation), in early (~7-weeks) and late pregnancy (~28-weeks). We used preconception food-frequency questionnaires to derive dietary pattern adherence scores. Associations between plasma nutrients, dietary patterns and PPROM/sPTB were determined with adjustment for covariates using regression.

Results: Greater adherence to a vegetable-fruit-nut dietary pattern associated with higher plasma concentrations of vitamin B2 (VB2), vitamin B6 (VB6) and *myo*-inositol. Increased vegetable-fruit-nut diet adherence preconception associated with lower PPROM/sPTB risk (adjusted odds ratio [aOR] 0.39 [95%CI 0.17,0.89] per SD diet-score, p=0.026), independently of intervention. As a combined-control-intervention-group, higher VB2 in early pregnancy (aOR 0.60 [0.39,0.92] per SD nutrient; p=0.018) and late pregnancy (0.55 [0.34,0.90]; p=0.018), and higher early

pregnancy VB6 (0.50 [0.30,0.82]; p=0·006) associated with reduced PPROM/sPTB risk. VB2 and VB6 showed largely independent effects (interaction-p=0.225). Achievement of newly-discovered VB2 and VB6 thresholds ~4-fold higher than historical non-pregnant deficiency thresholds could minimise PPROM/sPTB risk, but are difficult to achieve through diet alone.

Conclusions: VB2 and VB6 obtained through diet and supplementation may contribute to reducing PPROM/sPTB risk. RCTs are needed to evaluate the clinical efficacy of increased VB2 and VB6 supplementation in reducing sPTB.

Keywords:

Micronutrients, preconception-pregnancy supplementation, preterm birth, randomised controlled trial

Abstract ID: A-0028

Status:	Format of Presentation:	Abstract Category:	Format of Study:
Accepted	Poster	Obstetrics	Case Report

Abstract Title:

Wandering Spleen in Pregnancy with Thrombocytopenia - Silent but Significant

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Abstract Text:

Introduction:
Wandering spleen, or ectopic spleen, is a rare condition accounting for approximately 0.2% of cases, with a higher prevalence among women. It results from laxity of the splenic ligaments. Pregnancy itself contributes to this risk due to progesterone effect.

A complicating factor in this case was thrombocytopenia, a common haematological issue during pregnancy. However, managing thrombocytopenia alongside a wandering spleen poses unique challenges due to the potential risk of hypersplenism and splenic complications such as torsion or infarction, necessitating vigilant monitoring.

Case Description:
We report a case involving a 32-year-old Temiar Orang Asli woman, gravida 3, who was referred at 24 weeks' gestation for splenomegaly and thrombocytopenia. Clinical examination revealed a right hypochondriac mass, and subsequent ultrasound confirmed an enlarged spleen measuring 15.6 cm, with absence of the spleen in its normal anatomical position. Her platelet count showed a declining trend, dropping from 116,000 to 98,000, although peripheral blood film and infection screenings were unremarkable. A multidisciplinary team decided on conservative management, with two-weekly monitoring of splenic size, vascularity, and platelet counts. The patient remained asymptomatic and successfully completed her pregnancy, delivering vaginally at 39 weeks without complications. Plans were made for elective splenectomy postnatally.

Discussion:
Most of the reported case of wandering spleen, presented with acute abdomen as a result of splenic torsion. However in our case, we manage to treat conservatively, as the patient is asymptomatic. Although the initial drop in platelet counts raised concern, as the risk of platelet sequestration and hypersplenism, luckily spontaneous normalization occurred without intervention. Unlike most reported cases requiring surgery, our patient completed pregnancy without complication, emphasizing that expectant management can be successful with proper surveillance.

Conclusion:
Wandering spleen during pregnancy, though rare, can be managed conservatively in asymptomatic patients through early diagnosis, coordinated care, and diligent follow-up.

Keywords:

Wandering spleen, splenomegaly, pregnancy, thrombocytopenia

Abstract ID: A-0031

Status:	Format of Presentation:	Abstract Category:	Format of Study:
Accepted	Poster	Neonatal	Case Report

Abstract Title:

Methemoglobinemia and Basic Management: A Case Report on Methemoglobinemia with Acute Gastroenteritis and Lactose Intolerance

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Abstract Text:

Introduction:
Methaemoglobinemia is a rare disorder in which haemoglobin is oxidized to methaemoglobin (MetHb). The allosteric changes in haemoglobin result in the irreversible binding of oxygen and causing hypoxia. Neonatal presentation often includes cyanosis and hypoxemia.

Case report:
A Day-24 old term baby girl, presented with severe dehydration secondary to acute gastroenteritis and hypoxemia. Initial blood gas showed metabolic acidosis with high MetHb : pH 7.22, PCO2 26.2, PO2 36.2, HCO3 12.9, BE -16.9, MetHb 17.9%, Lactate 0.8. She required nasal oxygen 2L/min and three times fluid boluses on arrival 10ml/kg then followed by 10% fluid deficit correction. Antibiotics (Metronidazole, Cefotaxime) were started, and stool tests showed reducing sugars. After switching to lactose-free formula milk, blood gases normalized on day 4: pH 7.36, PCO2 38.7, PO2 37.1, HCO3 21.6, BE -3.2, MetHb 5.5%, and Lactate 2.7.

Discussion:
Methemoglobinemia can be inherited or acquired, with the acquired form being more common. However, distinguishing causes is not necessary for immediate treatment. The main morbidity in methemoglobinemia is related to the hypoxic state. The first-line treatment for MetHb is intravenous methylene blue (MB). Asymptomatic patients with MetHb levels under 20% can be monitored. Oxygen supplementation and hydration are essential for managing the hypoxic state. Timely treatment and investigation are key for proper management.

Keywords:

methemoglobinemia, neonate, cyanosis, hypoxemia

Abstract ID: A-0032

Status:	Format of Presentation:	Abstract Category:	Format of Study:
Accepted	Oral	Neonatal	Research Study

Abstract Title:

Home Visits and Home Visiting Programmes for Preterm, Small for Gestational Age and Low Birth Weight Infants after Hospital Discharge - A Scoping Review

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Abstract Text:

Introduction:
Preterm, low birthweight, and small for gestational age (collectively referred to as PLS) infants are at risk even after discharge from hospital. Parents face guilt and fear in caring for these vulnerable infants. While Malaysia provides home visits for all newborns, the specific needs of PLS infants and their parents may not be fully addressed. Although post-discharge interventions improve outcomes, there is limited guidance on their implementation. Our aim was to identify and map existing interventions from the literature that have been implemented to improve post-discharge care for PLS infants.

Objective:
To identify the preventive, promotive, diagnostic, and treatment components of home visits and home visiting programmes for PLS infants.

Methods:
We searched CINAHL, Cochrane Library, EMBASE, Medline, and PsycINFO to identify studies involving interventions delivered at home within the first five years of life for PLS infants. Eligible studies included any intervention aimed at improving infant and parent health and wellbeing after the initial or acute illness.

Results:
We found 19 studies focusing on home visiting interventions. Most were multicomponent, addressing feeding and growth support, parental support and education, developmental screening referrals, and access to community services. Additional elements included immunisation education, home immunisation, telephone support, and home-based monitoring. While many interventions were delivered by trained professionals, others involved paraprofessionals. Some home visiting programmes facilitated earlier discharge, thereby reducing hospitalisation and the associated risks and costs.

Conclusion:
We found a variety of additional interventions that could be offered to PLS infants, some of which are included in the Malaysian home-visiting programme but are currently not tailored towards the specific needs of PLS infants and parents. By training nurses, it might be feasible to adapt our current programme to meet the needs of PLS infants beyond hospital. This may improve long-term outcomes for these vulnerable infants.

Keywords: Home visits, preterm babies, low birth weight infants, small for gestational age infants, post-discharge support, infant well-being monitoring, growth, screening, immunisation

Abstract ID: A-0033

Status:	Format of Presentation:	Abstract Category:	Format of Study:
Accepted	Poster	Neonatal	Case Report

Abstract Title:

From Diagnosis to Decision-Making: Postnatal Management of Otocephaly - A Case Series

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Abstract Text:

Introduction:
Otocephaly is an extremely rare and severe congenital craniofacial malformation, with an estimated incidence of less than 1 in 70,000 live births. It is primarily characterized by agnathia or severe mandibular hypoplasia, melotia, microstomia and either aglossia or microglossia. These anomalies reflect disruptions in the development of the first branchial arch. In this report, we present a case series of three neonates diagnosed with otocephaly.

Case Description:
Case 1 - A premature female infant was delivered via Caesarean section at 31 weeks. Antenatal imaging revealed polyhydramnios, with a suspicion of duodenal atresia. On physical examination, there was bilateral down-slanting palpebral fissures, hypertelorism, microglossia, agnathia and synotia. She succumbed within one hour of life.

Case 2 - A premature infant was delivered at 28 weeks and 3 days of gestation via spontaneous vaginal delivery. Antenatal ultrasound had revealed polyhydramnios. At birth, the neonate was presented with microstomia, agnathia and synotia. In light of the severity and prognosis, no active resuscitation was initiated and he succumbed.

Case 3 – A preterm male infant was delivered at 36 weeks and 4 days of gestation via spontaneous vaginal delivery. A detailed antenatal scan revealed a beaked nose, small chin, small oral aperture, and polyhydramnios. At birth, the neonate was non-vigorous with microstomia and bilateral low set ears. Immediate resuscitation was required and an emergency tracheostomy was performed, however he succumbed.

Discussion:
Otocephaly represents a rare and typically lethal congenital anomaly. All three cases in our series shared antenatal features of polyhydramnios with postnatal findings consistent with otocephaly. Early prenatal detection through detailed anomaly scans and the presence of associated findings such as polyhydramnios can aid in anticipating this condition.

Keywords:

Perinatal, otocephaly

Abstract ID: A-0034

Status:	Format of Presentation:	Abstract Category:	Format of Study:
Accepted	Poster	Neonatal	Case Report

Abstract Title:

Neonatal Acute Liver Failure: A Race Against Time - Cases of Viral Aetiologies with Fatal Outcome

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Abstract Text:

Introduction:
Neonatal acute liver failure (NALF) is a rare but life-threatening condition, with viral infections being a common etiology. We present two cases of NALF secondary to viral infections that resulted in fatal outcomes in our neonatal intensive care unit, highlighting their clinical presentation and disease progression.

Case Description:

Case 1 - A term female infant with foetal intrauterine growth restriction and a birth weight of 2500g developed jaundice, poor feeding and weight loss at 6 days old. While initial investigations did not suggest infection, her liver function was abnormal with liver transaminitis that rapidly worsened. Over the next two days, her condition deteriorated further with coagulopathy and upper gastrointestinal bleeding, requiring support with ventilation, inotropes, blood products and intravenous immunoglobulin. Given a high suspicion of disseminated neonatal Herpes Simplex Virus (HSV) infection, intravenous acyclovir treatment was initiated. Unfortunately, she succumbed and HSV infection was confirmed with the detection of HSV 2 genome DNA.

Case 2 - A term male infant, admitted at birth due to an antenatal diagnosis of a complete vascular ring, presented with dysmorphic features, including a smooth philtrum, long, slender fingers and toes. On day 12 of life, developed pneumonia, requiring increased ventilatory support. Nasopharyngeal aspirate tested positive for Human Metapneumovirus A+B. He then developed conjugated hyperbilirubinemia and rapidly worsening transaminitis, progressing to acute liver failure with coagulopathy, hypoalbuminemia, and hyperammonaemia. Despite treatment with intravenous immunoglobulin, acyclovir, and meropenem, he showed no response and was deemed too unstable for an exchange transfusion and finally succumbed.

Discussion:
NALF often presents with subtle initial symptoms but progresses rapidly. Early recognition is essential to prevent severe complications and improve outcomes.

Keywords:

Liver failure, neonate

Abstract ID: A-0035

Status:	Format of Presentation:	Abstract Category:	Format of Study:
Accepted	Oral	Neonatal	Research Study

Abstract Title:

Factors Affecting Survival and Length of Hospital Stay Among Infants with Down Syndrome

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Abstract Text:

Background:
Down Syndrome (DS) is the most common birth defect resulting in an estimated prevalence of 14 in 10,000 live births. Despite improvement of survival of infants with DS, it is associated with multiple comorbidities which can complicate and prolong their hospital stay.

Objectives:
The primary objectives of this study are to investigate the initial length of hospitalization, outcomes and survival rate among infants with DS at 1-year, 2-years, and 5-years**.** Additionally, we aimed to identify the medical conditions observed in Down Syndrome and examine the factors influencing survival rate and length of hospitalisation.

Methods:
This is a retrospective cohort study using pre-existing data from two tertiary institutions, Universiti Malaya Medical Centre (UMMC), Kuala Lumpur and Hospital Sultanah Bahiyah, Alor Setar, Kedah. The subjects for this study were all newborns with an ICD-10/11 code diagnosis of Down Syndrome delivered between the 1st January 2018 to 31st December 2022 at these 2 tertiary centres.

Results:
A total of 266 data of babies with DS were analysed, with more male infants (n = 148, 55%), a higher proportion of Malay ethnicity (86%), and deliveries occurring at term or near term (n=189,71%) with mean (± SD) gestational age (GA) of 36 (± 0.03) weeks. The Kaplan-Meier overall cumulative survival rate probability curves were estimated at 96.6% for 1-year, 96.6% by 2-years and at 95.1% for 5-year survival rates. The mean (± SD) initial length of hospital stay at the neonatal unit or paediatric wards among DS infants is 25 (± 28.6) days. The 13 recorded deaths in this study were majority due to sepsis. The presence of any congenital heart disease and gastrointestinal disorders, were identified as influential factors affecting survival rates and the length of initial hospital stay.

Conclusions:
The overall survival rate of DS is high in Malaysia. The significant factors affecting survival rate and hospital stay among DS are the presence of congenital heart defects and gastrointestinal disease.

Keywords:

Down Syndrome, Mortality, Morbidity, Neonatal Outcomes

Acknowledgement:

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Abstract ID: A-0036

Status:	Format of Presentation:	Abstract Category:	Format of Study:
Accepted	Poster	Neonatal	Case Report

Abstract Title:

A Wolf in Sheep's Clothing: A Benign Tumor with Hidden Challenges: Neonatal Cardiac Rhabdomyoma

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Abstract Text:

Introduction:
Primary cardiac tumours in children are rare with cardiac rhabdomyomas being the most common and frequently associated with tuberous sclerosis complex (TSC). While typically benign with a tendency for spontaneous regression, these tumours can also cause significant morbidity depending on their size and location.

Case description:
We encountered two neonatal cases presenting with respiratory distress at an early postnatal period who were diagnosed to have multiple large lobulated intracardiac mass consistent with cardiac rhabdomyoma through a screening echocardiography. The first infant was managed conservatively and demonstrated spontaneous tumour regression over time, with no extracardiac features nor family history suggestive of tuberous sclerosis. In contrast, the second infant developed severe left ventricular outflow tract obstruction and cardiac arrhythmia. Although the initiation of oral sirolimus was planned, unfortunately, the baby succumbed despite supportive treatment.

Discussion:
These cases illustrate the variable clinical course of cardiac rhabdomyoma. While expectant management remains appropriate for asymptomatic patients due to the tumour's regressive nature, it is evident that symptomatic neonates may face life-threatening cardiac complications. This highlights the need for tailored management strategies in improving outcomes in affected patients. Till date, sirolimus has been reported to have a significant role in promoting the regression of cardiac rhabdomyomas, yet data on dose, duration and safety profile in newborns remains limited.

Keywords:

cardiac rhabdomyoma, neonate

Abstract ID: A-0037

Status:	Format of Presentation:	Abstract Category:	Format of Study:
Accepted	Poster	Neonatal	Case Report

Abstract Title:

Born into a Viral Storm: Exploring MIS-N in the Wake of Maternal Influenza

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Abstract Text:

This case report describes a neonate presenting with MIS-N (Multisystem Inflammatory Syndrome in Neonates) without COVID-19 infection but following a recent Influenza A infection in mother. The baby boy was born at 36 weeks, weighing 1.6 kg. His mother had contracted Influenza A infection (COVID screening negative) one week before delivery and was referred due to late-onset pregnancy-induced hypertension and foetal distress, leading to an emergency C-section. The placenta appeared healthy. He was born vigorous with a good Apgar score but required non-invasive ventilation for mild respiratory distress for four days. He was later weaned to room air by day 11 of life.

He had several complications during first few days of life, including hypoglycaemia (treated with IVI glucagon), pathological jaundice with conjugated hyperbilirubinemia and transaminitis, persistent thrombocytopenia and metabolic acidosis with hyperlactatemia. On day 5 of life, he developed cracked lips and skin peeling, although there were no temperature instabilities. His COVID 19 polymerase chain reaction tested negative. A formal echocardiogram showed moderately dilated coronary arteries [LMCA 2.23mm (Z-score:4.8), LAD 1.9mm (Z-score:4.68), RCA 1.6mm (Z-score:3.23)] and a small ASD secundum. Abdominal ultrasound revealed a left UTD P1. The baby was diagnosed with MIS-N and treated with IVIg (1g/kg for two days), and he was started on oral aspirin once his platelet counts improved. A follow-up echocardiogram at day 15 of life post IVIg showed normal-sized coronary arteries. Other blood parameters also showed improvement.

The maternal Influenza A infection likely triggered a cytokine storm, resulting in foetal immune activation and inappropriate immune response that caused inflammation in multiple organ systems, which is characteristic of MIS-N. Dermatological manifestation was a unique entity. Aim of this case report is to highlight the possibility of MIS-N in other maternal viral infections.

Keywords:

MIS-N, maternal influenza, cytokine storm

Abstract ID: A-0038

Status:	Format of Presentation:	Abstract Category:	Format of Study:
Short-listed for Best Oral	Oral	Neonatal	Research Study

Abstract Title:

Randomized Controlled Trial on Efficacy and Safety of Oral Paracetamol Versus Intravenous Paracetamol in Preterm Infants with Patent Ductus Arteriosus

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Abstract Text:

Background:
Treatment of hemodynamically significant patent ductus arteriosus in preterm infants with paracetamol is considered safer than traditional non-steroidal anti-inflammatory agents. Despite widespread use, direct comparisons between oral and intravenous paracetamol remain limited.

Objectives:
This study aimed to evaluate the efficacy and safety of oral versus intravenous paracetamol in the pharmacological closure of hemodynamically significant patent ductus arteriosus in preterm infants.

Methods:
A single-center randomized controlled trial was conducted at the neonatal intensive care unit of Hospital Pakar Universiti Sains Malaysia from January 2023 to November 2024. Fifty-four preterm infants (26 to 33+6 weeks gestational age) diagnosed with hemodynamically significant patent ductus arteriosus were randomized to receive either oral or intravenous paracetamol (15 mg/kg every 6 hours for 3 days). A second course was administered when initial treatment failed. The primary outcome was complete ductal closure; secondary outcomes included renal and hepatic function, early complications, and late neonatal morbidities over a 30-day follow-up period.

Results:
Baseline characteristics were comparable between groups. Ductal closure was significantly higher with intravenous paracetamol compared to oral paracetamol (92.6% vs 69.6%; p=0.035). The intravenous group also demonstrated greater reduction in ductal size (p=0.018). No significant differences were observed in early complications (oliguria, liver enzyme derangement, renal function impairment, intraventricular haemorrhage) or late complications (prolonged oxygen dependency, sepsis, mortality) between groups. Both administration routes showed favourable safety profiles without serious adverse effects.

Conclusion:
Intravenous paracetamol demonstrated superior efficacy compared to oral administration in achieving ductal closure in preterm infants, particularly after a second treatment course, while maintaining a similar safety profile. These findings suggest intravenous paracetamol as a preferred option in the management of hemodynamically significant patent ductus arteriosus.

Keywords:

Intravenous paracetamol; NICU; oral paracetamol; patent ductus arteriosus; prematurity

Abstract ID: A-0039

Status:	Format of Presentation:	Abstract Category:	Format of Study:
Accepted	Poster	Nursing	Research Study

Abstract Title:

Post-Natal Remote Care Follow-Up via Video-Call: Trial Study in KPJ Perdana Specialist Hospital, Kota Bharu, Kelantan

Authors & Institutions:

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Abstract Text:

Background
In response to the increasing demand for high-quality postnatal care, KPJ Perdana Specialist Hospital has introduced a remote follow-up program aimed at supporting mothers and newborns during the critical early days following hospital discharge. This initiative, inspired by the efficient postnatal practices of Kementerian Kesihatan Malaysia (KKM), leverages virtual consultation technologies to enhance care accessibility, reduce unnecessary clinic visits, and strengthen the continuity of care.

Objectives
The objective was to monitor and manage common postnatal concerns such as neonatal jaundice, feeding difficulties, sepsis risk, and maternal recovery between days 1 to 5 post-discharge.

Methods
A cohort of 51 mother-infant pairs discharged between October 2024 and March 2025 were enrolled, excluding those with neonatal complications requiring tertiary care. Consultations were conducted via scheduled video calls led by Staff Registered Nurses (SRNs), with oversight by a Consultant Paediatrician. Clinical assessments included infant feeding, weight, jaundice signs, sleep, stool patterns, and maternal well-being.

Results
The study population had a mean maternal age of 32 years and mean gestational age of 38.2 weeks. Deliveries included 39 normal and 12 caesarean sections, with an almost equal male-to-female ratio. Three participants were lost to follow-up. Responses indicated strong engagement and the feasibility of early postnatal remote care.

Conclusion
The program demonstrated potential in enhancing neonatal and maternal outcomes, providing timely interventions, and fostering trust between healthcare providers and families.

Keywords:

Post-natal, remote care, video-call, timely intervention, fostering trust

Abstract ID: A-0040

Status:	Format of Presentation:	Abstract Category:	Format of Study:
Accepted	Poster	Neonatal	Case Report

Abstract Title:

Portal Vein Thrombosis in the Donor Twin of a Twin Reversed Arterial Perfusion (TRAP) Sequence: A Case Report

Authors & Institutions:

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Abstract Text:

Background:
Twin reversed arterial perfusion (TRAP) sequence is a rare complication of monozygous pregnancies. In this complication, a donor twin with normally developed organs provides blood supply to a recipient twin without definitive heart structure, the acardiac twin. The pathophysiology of this phenomenon is still not well understood, but it is proposed that arterial blood flow flows in a reverse manner from the donor twin towards the acardiac twin, instead of away from it. Likewise, neonatal portal vein thrombosis (PVT) is often observed in patients with a history of umbilical vein catheterization (UVC) and rarely occurs spontaneously.

Case Report:
We report a case of a portal vein thrombosis in an infant with TRAP sequence. The mother was a 30-year-old primigravida with no underlying medical illness. At 18 weeks of gestation, a diagnosis of TRAP sequence was made. The donor twin showed normal growth and structures while the acardiac twin showed no foetal heart pulsation and no brain development. Radiofrequency ablation of the blood supply to the acardiac twin was performed at 20 weeks of gestation. The donor twin was born via emergency lower segment caesarean section due to failed induction of labour and was born vigorous. There were no hydropic features and the patient was systemically well. An ultrasound abdomen performed after birth showed left intrahepatic vein thrombosis. Thrombophilia and coagulopathy screening were normal.

Discussion:
Neonatal PVT is rarely seen in infants without a history of UVC insertion. In this case, however, we postulate that the PVT may have resulted from abnormal perfusion associated with the TRAP sequence. To our knowledge, there are no published reports linking PVT to TRAP sequence. This observation highlights the need for further investigation into atypical causes of neonatal PVT, particularly in the context of rare conditions like TRAP sequence.

Keywords:

portal vein thrombosis, twin pregnancy

Abstract ID: A-0041

Status:	Format of Presentation:	Abstract Category:	Format of Study:
Accepted	Poster	Neonatal	Research Study

Abstract Title:

Parental Knowledge and Perception of Premature Baby Care: A Cross-Sectional Study Among Parents of Premature Infants in Hospital Pulau Pinang.

Authors & Institutions:

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Abstract Text:

Background:
Premature infants are vulnerable to various complications, including respiratory issues, feeding intolerance, infections, and long-term neurodevelopmental delay. Despite advancements in neonatal care, post-discharge outcomes remain highly dependent on parental preparedness. Inadequate knowledge and misconceptions may lead to increased hospital readmissions and caregiver stress. However, there is limited research regarding this, particularly in our local setting.

Objectives:
This study aims to assess parental knowledge regarding the care of premature infants after hospital discharge. Specific objectives include identifying common misconceptions, evaluating parental confidence, and determining preferred sources of information and support services.

Methods:
A cross-sectional survey was conducted among 100 parents of preterm infants (< 37 weeks gestation) attending follow-up in the Neonatal clinic, Hospital Pulau Pinang. A structured questionnaire was used to evaluate the demographics and knowledge of parents. Data was analyzed using SPSS version 26.

Expected Results:
The study aims to identify significant knowledge gaps and areas of low confidence among parents regarding the care of premature infants. These findings will lead to development of targeted educational materials and follow-up support services.

Conclusions:
It is crucial to understand parental knowledge and perceptions to improve neonatal discharge education and outcomes for premature infants. This study will provide local insights that can help shape more effective, family-centered care models and neonatal policies in Hospital Pulau Pinang.

Keywords:

premature baby care

Abstract ID: A-0042

Status:	Format of Presentation:	Abstract Category:	Format of Study:
Accepted	Poster	Neonatal	Case Report

Abstract Title:

Beneath the Golden Skin: A Hidden War of Antibodies and Iron

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Abstract Text:

Background:
Gestational Alloimmune Liver Disease (GALD) is a rare but life-threatening neonatal liver disorder caused by maternal alloimmune injury. Early diagnosis and timely immunotherapy are key to improving outcomes.

Case Report:
A female infant was born at 36 weeks 6 days via emergency LSCS for failed induction due to intrauterine growth restriction (birth weight 2.6 kg). Maternal history included two prior adverse outcomes: an early neonatal death with findings suspicious for neonatal hemochromatosis, and a term intrauterine death.
The infant was admitted to NICU at 11 hours of life for symptomatic hypoglycaemia (glucose 0.7 mmol/L). Initial investigations revealed deranged liver enzymes (AST 270 U/L, ALT 33 U/L, ALP 282 U/L), hypoalbuminaemia (28 g/L), conjugated hyperbilirubinaemia (22%), coagulopathy (PT 43.3, INR 3.61, APTT 84.9), hyperferritinaemia (5959), elevated transferrin saturation (52%), and raised alpha-fetoprotein (>300,000 ng/ml). Abdominal ultrasound showed increased periportal echogenicity.
With high suspicion for Gestational Alloimmune Liver Disease (GALD), she underwent exchange transfusion at 24 hours of life, followed by IVIG (1 g/kg), daily IV albumin, and vitamin K. Empirical antibiotics and acyclovir were administered for one week. Blood cultures remained negative. Liver biopsy on day 5 showed mucous extravasation with staining supportive of neonatal hemochromatosis.
Liver function and coagulation profile improved and normalized by day 20 of life. A transient AST elevation on day 14 of life coincided with ophthalmia neonatorum, with ESBL *Klebsiella pneumoniae* isolated from eye swab. MRI T2* at day 28 of life showed no extrahepatic hemosiderin and normal liver iron load.
Her initial growth was suboptimal but improved with caloric optimization, achieving catch-up growth by one month. At one year, her liver function remained normal with no signs of cirrhosis.

Conclusion:
This case highlights the importance of early recognition and prompt immunotherapy in suspected GALD to improve survival and long-term hepatic outcomes.

Keywords:

Gestational alloimmune liver disease, hypoglycaemia,

Abstract ID: A-0043

Status:	Format of Presentation:	Abstract Category:	Format of Study:
Short-listed for Best Oral	Oral	Neonatal	Research Study

Abstract Title:

MDR *Acinetobacter baumannii* (MDR ACB) Outbreak in NICU Hospital Tuanku Ja'afar Seremban: A Hospital-based Retrospective Study

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Abstract Text:

Background
Acinetobacter baumannii(ACB), a gram-negative pleomorphic bacillus, is one of the most important hospital-acquired infection. It survives on dry or moist hospital surfaces causing outbreaks that are difficult to control, affecting vulnerable and critically ill patients. Neonates are at increased risk due to their immature immune systems and frequent need for invasive procedures.

Objectives
Our study aims to describe the hit-rate and outcomes of an outbreak of multidrug resistance (MDR) ACB infections as well as associated risk factors in a Neonatal Intensive Care Unit (NICU).

Method
An outbreak was declared on 27 September 2024 after 8 patients were infected. Thus, universal screening was conducted. Data were collected retrospectively from medical records of all neonates admitted between 27 September 2024 and 22 October 2024 to determine patient's demographic and outcomes. Risk factors associated are identified using multiple logistic regression analysis.

Results
A total of 19 patients were infected or colonised with MDR ACB, a hit rate of 32.7%, with the median age at detection of 10 days. 24 positive cultures were identified, primarily from rectal swabs (78.9%), followed by tracheal aspirate (31.5%), blood (26.3%), and cerebrospinal fluid (5.3%). There were 3 deaths in this cohort, a mortality rate of 15.8%. The risk factors identified include prematurity with very low birth weight, mechanical ventilation, usage of long line, total parenteral nutrition as well as the administration of broad-spectrum antibiotics. Using multivariate analysis, the use of Cefotaxime has been identified as a significant risk factor (aOR: 13.8, 95% CI: 1.45-131.18, p= 0.02).

Conclusions
The findings of this study highlighted the importance of antibiotic stewardship in minimizing antibiotic resistance in intensive care units alongside other outbreak control measures. However, further research is warranted with a bigger sample size.

Keywords:

Multidrug resistance, *Acinetobacter baumanii*

Abstract ID: A-0044

Status:	Format of Presentation:	Abstract Category:	Format of Study:
Short-listed for Best Oral	Oral	Neonatal	Research Study

Abstract Title:

Impact of Delayed Cord Clamping on Neonatal Outcomes and Iron Status at 3 months of age in Term Infants: A Cohort Study at Hospital Tuanku Ja'afar Seremban.

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Abstract Text:

Background:
Early cord clamping (ECC) has been the standard practice in all deliveries. Delayed cord clamping (DCC) allows continued blood flow from the placenta to the infant, supporting a smoother physiological transition and conferring significant benefits to the newborn. It increases haemoglobin levels (Hb) and iron reserves, which can lower the risk of iron deficiency anaemia (IDA) in early childhood which has detrimental effects on neurodevelopmental outcomes. With the growing evidence, Ministry of Health of Malaysia had implemented the use of DCC since January 2025 following the recommendation from American Academy of Pediatrics (AAP) 2021

Objectives:
To evaluate DCC's impact on neonatal haemoglobin, polycythaemia and jaundice at birth and IDA at 3 months old.

Methods:
A prospective cohort study on term infants at Hospital Tuanku Ja'afar Seremban (February 2025 onward): ECC group (non-vigorous infants, cord was clamped immediately and requiring resuscitation) and DCC group (vigorous infants, cord was clamped at 60 seconds). Bloods taken to assess haemoglobin (Hb) and bilirubin level between 6–24 hours and iron status at three months old.

Results:
Ninety-two infants were included, consisting of 43 infants in the ECC group and 49 infants in the DCC group. We found that the mean Hb for the DCC group was higher than the ECC group (19.29 ± 2.53 g/dL vs. 18.88 ± 2.30 g/dL) though not statistically significant. Bilirubin levels (124.31 ± 38.13 µmol/L vs. 116.72 ± 38.85 µmol/L) and jaundice prevalence (26.5% vs. 14.0%) were marginally higher in the DCC group, but differences were not statistical significance. A follow up study will be done to assess iron status at 3 months old.

Conclusion:
DCC demonstrated improve haemoglobin levels at birth, potentially enhancing iron reserves in early childhood without increasing risks of polycythaemia or significant jaundice, however it was not statistically significant due to small sample size.

Keywords:

Delayed Cord Clamping

Abstract ID: A-0045

Status:	Format of Presentation:	Abstract Category:	Format of Study:
Accepted	Poster	Neonatal	Case Report

Abstract Title:

Case Series of Nutritional Rickets in Neonatal Intensive Care Unit, Hospital Sultanah Bahiyah

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Abstract Text:

Introduction:
Vitamin D is an essential nutrient that is crucial in maintaining bone health and calcium homeostasis, prenatally and during children's growing phase. Pregnant women with vitamin D insufficiency or deficiency can affect foetal skeleton development and calcium accretion. Nutritional rickets in neonates can be asymptomatic, or range from mild to severe presentations i.e. seizure or fractures.

Case Series:
We retrospectively reviewed the clinical characteristics of six neonates diagnosed with nutritional rickets between 2023 and 2025. Three presented with seizures, while the other three had skull fractures. All were term, well-grown male infants born to Malay mothers aged 23–34 years. The mothers were generally healthy, except for one with obesity and another with anaemia and chorioamnionitis.
Five neonates were delivered via lower segment Caesarean section (LSCS), and one via vacuum-assisted vaginal delivery. Two neonates with skull fractures were identified at birth, and a third was diagnosed on day three of life. One of these infants developed an intracranial haemorrhage requiring surgical intervention.
Three neonates presented between 2 and 3 weeks of age with recurrent seizures and were found to have severe hypocalcaemia, with corrected calcium levels ranging from 1.49 to 1.97 mmol/L. Their 25-hydroxyvitamin D [25(OH)D3] levels were deficient (11–31 nmol/L), while intact parathyroid hormone (iPTH) levels were normal or elevated (32–77.3 pg/mL). The absence of an iPTH rise in some cases may be attributed to prior intravenous calcium infusion for rescue, as iPTH was measured later during stabilization.
Aside from skull fractures, no other radiographic abnormalities were observed. Due to logistical constraints, only two mothers had their bone profile and vitamin D status evaluated, both of which were consistent with their respective infants' deficiencies. All neonates were treated with appropriate calcium and cholecalciferol supplementation, and their mothers were counselled accordingly.

Discussion:
Global consensus of nutritional rickets recommends adequate vitamin D and calcium intake among childbearing age and pregnant women. Similarly, all infants (0-12 months old) should be supplemented with vitamin D, regardless of their feeding mode. Awareness about calcium and vitamin D deficiency in both mother and infant, is crucial for promoting healthy bone development and overall well-being.

Keywords:

Neonate, vitamin D deficiency, hypocalcaemic seizures, skull fracture, calcium

Abstract ID: A-0046

Status:	Format of Presentation:	Abstract Category:	Format of Study:
Accepted	Poster	Neonatal	Case Report

Abstract Title:

From Stridor to Stability: A Case of Neonatal Vocal Cord Paralysis

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Abstract Text:

Background:
Congenital vocal cord paralysis (VCP) is the second most common cause of congenital stridor, and can present in both bilateral and unilateral forms, with each accounting for approximately 50% of cases. Contributing factors includes iatrogenic injury and neurological disorders. However, the majority of cases are idiopathic in origin. This report discusses a case of an infant with a left ectopic thymus compressing the left recurrent laryngeal palsy resulting in stridor soon after birth.

Case Report:
A term male newborn was delivered via Caesarean section following an uncomplicated pregnancy and delivery with APGAR scores 9 and 10. He developed loud inspiratory stridor with chest recessions on day 6 of life, requiring CPAP support. Physical examination revealed no dysmorphism or neurological deficits, and echocardiography ruled out external compression from vascular structures. Otorhinolaryngology (ORL) consult was arranged and a bedside flexible nasopharyngo-laryngoscopy revealed left vocal cord immobility in the paramedian position, consistent with unilateral vocal cord palsy. MRI later identified an ectopic left cervical thymus at left tracheoesophageal groove.

The management was of a conservative, multidisciplinary approach involving neonatology, otorhinolaryngology, occupational and speech-language pathology teams, with CPAP support, nasogastric tube feeding, anti-reflux medications, and close respiratory monitoring. The infant showed improved voice strength and resolution of stridor by day 48 of life, and a repeat direct laryngoscopy showed improvement in vocal cord mobility. He was then discharged at day 50 of life, with scheduled follow-up appointments to monitor his symptoms and vocal cord recovery.

Discussion:
This case highlights the critical importance of early detection of vocal cord palsy in neonates presenting with stridor. In mild unilateral cases, conservative treatment can lead to a good prognosis without surgical intervention. Careful monitoring and follow-up are vital to achieve optimal outcomes in airway management, feeding, and overall growth and development.

Keywords:

Vocal cord paralysis, congenital stridor, airway management, neonatal respiratory distress

Abstract ID: A-0047

Status:	Format of Presentation:	Abstract Category:	Format of Study:
Accepted	Poster	Neonatal	Case Report

Abstract Title:

A Case of Transient Severe Neonatal Lactic Acidosis with Spontaneous Resolution

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Abstract Text:

Background
Lactic acidosis is a common finding in NICU. It is important to identify the cause to determine the treatment option and the prognosis. We describe a moderate preterm infant with transient severe lactic acidosis with negative whole genome sequencing (WGS).

Report
A male infant was born at 32 weeks' gestation via emergency Caesarean section for preterm labour. He was conceived through in vitro fertilization to non-consanguineous parents. At birth, he required intubation for respiratory distress syndrome but remained haemodynamically stable despite persistent mild metabolic acidosis. Initial septic workup was negative. On day 3 of life, he developed acute clinical deterioration, with worsening respiratory distress, poor myocardial contractility, hyperglycaemia, and markedly elevated serum lactate levels (>15 mmol/L). Ammonia was mildly elevated. He required intensive support, including inotropes, peritoneal dialysis, sodium bicarbonate, and insulin infusion.
Empirical treatment for a possible inborn error of metabolism (IEM) was initiated, including a protein-free formula, Co-enzyme Q10, L-carnitine, and thiamine. Serum lactate normalized over the following days. He was successfully extubated after 5 days of ventilation.
Urine organic acid analysis was suggestive of congenital lactic acidosis or a mitochondrial disorder; however, further extensive metabolic investigations, including WGS, were unremarkable. The infant was discharged at term with home CPAP for bronchopulmonary dysplasia (BPD) and continues to do well on follow-up.

Conclusion
The markedly elevated serum lactate level (>15 mmol/L) in our case supports a primary cause of lactic acidosis, such as a defect in the respiratory chain or pyruvate metabolism. Given the spontaneous resolution of hyperlactatemia, absence of dysmorphic features, and normal plasma amino acid profile, we hypothesize that the infant may have had a transient complex IV deficiency, a condition known to carry a favourable prognosis. Negative findings on WGS have been reported in similar cases, suggesting a genetic aetiology yet to be identified. However, we did not perform tissue-based complex IV enzymatic activity assays to confirm the diagnosis. Further investigations may be warranted if new symptoms arise during follow-up.

Keywords:

Lactic acidosis, Mitochondrial disorder, Complex IV deficiency, Whole Genome Sequencing

Abstract ID: A-0048

Status:	Format of Presentation:	Abstract Category:	Format of Study:
Short-listed for Best Oral	Oral	Neonatal	Research Study

Abstract Title:

Randomised Controlled Trial on Short Term Effect of High Versus Low Position of Umbilical Catheter in Neonates

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Abstract Text:

Background: Umbilical artery catheters (UAC) are essential and frequently used in neonatal intensive care units (NICU) for invasive blood pressure monitoring and blood sampling in critically ill neonates. The optimal position of the UAC whether a high position (T6-T9) or low position (L3-L4) constantly remains debatable.

Objective: Objective of this study is to determine the short-term complications of high position versus low position UAC in neonates.

Methods: This is a prospective study and randomized controlled trial conducted at Hospital Universiti Sains Malaysia since July 2024 until February 2025.168 neonates requiring UAC insertion were randomized to either high position UAC or low position UAC. The primary outcome was the frequency of complications related to the two UAC positions. Secondary outcomes included complications related to repositioning of UAC and the duration of UAC in-situ.

Result: This study showed a higher complications rate in high UAC in which 13 neonates (15.9%) had at least one complication, compared to 6 neonates (7.0%) in the low UAC (p=0.089). The complications between the high vs low position UAC: feeding intolerance 8.5% vs. 0%, p=0. 006, acute kidney injury 6.1% vs 1.2% p=0.11, NEC 2.4% vs 0%, p= 0.24, hypertension 1.2% vs. 0%, p=0.49. Both IVH and vascular compromise occurrence are comparable between both UAC group. No aortic thrombosis and haematuria were observed in either group. 52.6% neonates with complications have duration of catheter in situ for 7 days, p=0.034, 36.8 % of neonates with catheter readjustment developed complications, p= 0.292.

Conclusion: This study showed high UAC overall had higher complication as compared to low UAC. Longer duration of UAC in situ and catheter readjustment also related to higher rate of complications. Future randomized controlled trials with larger sample sizes are required to confirm the result in this study and support the potential changes in clinical practice.

Keywords:

Umbilical artery catheter, neonatal intensive care unit, complications

Abstract ID: A-0049

Status:	Format of Presentation:	Abstract Category:	Format of Study:
Accepted	Poster	Neonatal	Case Report

Abstract Title:

Targeting mTOR Inhibition in a Neonate with Cardiac Rhabdomyoma: Sirolimus as a Game Changer

Authors & Institutions:

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Abstract Text:

Background:
Tuberous sclerosis complex (TSC) is a rare autosomal dominant neurocutaneous multi-system disorder caused by pathogenic variants in the TSC1 and TSC2 genes. These genes produce tuberin and hamartin which forms a complex that negatively regulates the mechanistic target of rapamycin (mTOR) cascade. Thus, defect in TSC1 or TSC2 gene leads to aberrant activation of mTOR and resulting in heightened cell proliferation. Clinical manifestations of TSC include the precipitation of hamartomas in multiple organs. Cardiac rhabdomyoma is one of the many manifestations of TSC which may potentially lead to significant hemodynamic compromise, arrhythmias or obstruction, necessitating early intervention. Sirolimus, an mTOR inhibitor, has emerged as a promising non-surgical therapeutic option.

Case Report:
We present a case of a preterm baby boy was born at 34 weeks gestation with birth weight of 2060g to a parent with TSC. He was antenatally diagnosed with multiple cardiac masses. He had an elder sibling who passed away during neonatal period due to large cardiac rhabdomyomas which were inoperable. He was born vigorous and was admitted to NICU for brief ventilation due to transient tachypnoea of newborn. Postnatal ECHO showed large cardiac masses (rhabdomyomas) of varying size causing left ventricular outflow obstruction, for which he was started on oral Sirolimus 0.5mg/m^2/day on Day 2 of life. Serial ECHO showed marked regression of cardiac tumours.

Conclusion:
Sirolimus therapy appears to be an effective and well tolerated alternative to surgical intervention in neonates with symptomatic cardiac rhabdomyomas, especially in the context of TSC. Early diagnosis and prompt initiation of mTOR inhibition may lead to rapid tumour regression and improved clinical outcomes.

Keywords:

cardiac rhabdomyoma, tuberous sclerosis complex

Abstract ID: A-0050

Status:	Format of Presentation:	Abstract Category:	Format of Study:
Accepted	Poster	Neonatal	Case Report

Abstract Title:

Unmasking The Hidden Threat: Postnatal Cytomegalovirus Infection in an Extremely Low Birth Preterm Infant

Authors & Institutions:

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Abstract Text:

Background:
Postnatal cytomegalovirus (pCMV) refers to postnatal acquisition of CMV and transmission commonly occurs through breast milk. pCMV remains an under-recognized cause of morbidity in preterm infants as its clinical presentation often nonspecific, mimicking common neonatal conditions such as sepsis or cholestasis. Without high index of suspicion, diagnosis may be delayed and this could potentially impact the outcomes.

Case Report:
We report a case of an extremely low birth weight infant born via spontaneous vertex delivery at 27 weeks with birth weight of 770 grams. Growth parameters were appropriate for gestational age. Mother is 35 years old, para 2, antenatal history she has chronic hypertension and overt diabetes mellitus.

The infant was initially admitted for respiratory distress syndrome, later complicated by bronchopulmonary dysplasia (BPD), a hemodynamically significant patent ductus arteriosus (PDA) with cardiac failure, and stage 3 retinopathy of prematurity (ROP). She experienced multiple episodes of ventilator-associated pneumonia, although blood cultures remained persistently negative.
On day 51 of life, she developed a rising C-reactive protein (CRP) level and persistent severe thrombocytopenia, prompting empirical antibiotic and antifungal therapy. Despite treatment, blood cultures continued to be negative. She subsequently developed transaminitis, conjugated hyperbilirubinaemia, hepatomegaly, and pale stools. An abdominal ultrasound revealed features suspicious of biliary atresia, while cranial ultrasound showed no intracranial calcifications.
TORCH screening performed on day 59 revealed positive cytomegalovirus (CMV) immunoglobulin M. Blood CMV polymerase chain reaction (PCR) confirmed a high viral load of 34,700 IU/mL. Intravenous ganciclovir was initiated, with good clinical response. One month after treatment, her urine CMV PCR showed a significant reduction in viral load to 4,463 IU/mL. Her haematological parameters normalized, liver function improved, and cholestasis resolved.

Conclusion:
This case underscores the importance of maintaining a high index of suspicion for pCMV, given its highly heterogenous and non-specific clinical presentation, which can easily lead to delayed diagnosis and treatment.

Keywords:

Postnatal cytomegalovirus infection

Abstract ID: A-0051

Status:	Format of Presentation:	Abstract Category:	Format of Study:
Accepted	Poster	Neonatal	Case Report

Abstract Title:

Neonatal Supraventricular Tachycardia: Case Series and Management Outcomes

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Abstract Text:

Introduction:
Supraventricular tachycardia (SVT) is one of the most common cardiac conditions requiring emergency cardiac interventions in neonates. Incidence occurred approximately 1 in 250 neonates and 1 in 10 infants with congenital heart disease.

Case description:
We describe three neonates diagnosed with supraventricular tachycardia (SVT) managed in our department. Two of the infants were born at term via Caesarean section due to foetal tachycardia, with antenatal heart rates recorded at approximately 200 beats per minute (bpm). Both were of normal birth weight, and their mothers had gestational diabetes mellitus (GDM). At birth, the heart rates exceeded 220 bpm, requiring intravenous adenosine followed by amiodarone for rhythm control. Echocardiography revealed patent foramen ovale in both cases, with no structural heart defects. Blood investigations were unremarkable. Both infants were discharged in stable condition on oral propranolol and amiodarone.

The third baby was born at 36 weeks with normal birth weight via caesarean section for foetal bradycardia whose mother had GDM. Echocardiography showed double outlet right ventricle and transposition of great arteries, consistent with the antenatal detailed ultrasonography. She underwent pulmonary artery banding, atrial septostomy and PDA ligation, at day 35 of life, which was complicated with sternal wound infection. She developed haemodynamically unstable SVT which required defibrillation, CPR and amiodarone. She passed away at 2 months old due to nosocomial sepsis.

Discussion:
SVT in neonates can present acutely and require prompt recognition and intervention to prevent morbidity and mortality. In our cases, two term infants without significant structural heart disease responded well with pharmacological therapy and had favourable outcomes. However, the third case highlights the complexity in managing SVT in complex congenital heart disease and associated with poor outcomes especially in cases with postoperative complications and sepsis. Persistent foetal tachycardia in antepartum period may be an early sign of neonatal SVT, especially in the setting of maternal GDM, hence early recognition and intervention are crucial for better prognosis

Keywords:

Supraventricular tachycardia

Abstract ID: A-0052

Status:	Format of Presentation:	Abstract Category:	Format of Study:
Accepted	Poster	Neonatal	Case Report

Abstract Title:

A Line Crossed: Hepatic and Peritoneal Complications from Umbilical Venous Catheter Malposition in a Micro Preemie

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Abstract Text:

Background:
Umbilical venous catheter (UVC) placement is a common procedure in the neonatal intensive care unit (NICU) for central venous access in preterm infants. While UVC use is generally safe, catheter malposition can result in serious and potentially life-threatening complications. We report a case of total parenteral nutrition (TPN) ascites and hepatic injury secondary to a low-lying UVC in an extremely preterm infant.

Report:
A male infant weighing 720 grams was born at 25 weeks' gestation via spontaneous vaginal delivery to a 31-year-old primigravida with gestational diabetes and prior cervical cerclage. He required early intubation, surfactant, and high-frequency ventilation for respiratory distress syndrome; and was treated with broad-spectrum antibiotics for early-onset *Klebsiella pneumoniae* (ESBL) sepsis.
Umbilical arterial and venous catheters were inserted on Day 1 of life. Imaging showed the 3.5Fr UVC tip to be low-lying. Although recognised as suboptimal, the catheter was used temporarily for TPN administration as alternative central access was not immediately feasible. On Day 4, he developed abdominal distension, whitish scrotal swelling, haemodynamic instability and severe mixed acidosis. Ultrasound revealed generalized ascites and a hepatic fluid collection in segment VIII, suggestive of extravasation. Paracentesis yielded milky fluid consistent with TPN. A peritoneal drain was inserted and remained for two days, with gradual improvement under conservative management.

At two months of age, the infant developed sigmoid colon perforation requiring laparotomy and colostomy. Intraoperatively, dense interloop and anterior abdominal wall adhesions were noted, likely sequelae of prior TPN ascites. He later underwent successful stoma reversal and was discharged at five months on room air and full feeds.

Conclusion:
This case underscores the importance of accurate UVC tip confirmation and the need to reassess continued use if malpositioned. In extremely preterm infants, catheter malposition can result in serious complications, including hepatic injury and TPN ascites, with potential long-term morbidity.

Keywords:

Neonatal, preterm, umbilical venous catheter (UVC), Total Parenteral Nutrition (TPN), complications

Abstract ID: A-0053

Status:	Format of Presentation:	Abstract Category:	Format of Study:
Short-listed for Best Oral	Oral	Neonatal	Research Study

Abstract Title:

Optimizing Screening Strategies for Congenital Infections: Insights from a Decade of Neonatal Data

Authors & Institutions:

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Abstract Text:

Background:
Congenital infections are significant contributors to neonatal morbidity and long-term neurodevelopmental impairment. Universal screening approaches, particularly for small for gestational age (SGA) infants, are widely practiced, but their diagnostic yield may be low. Refining screening strategies is important to improve diagnosis and cost effectiveness.

Objectives:
To determine the incidence of congenital infections in a tertiary neonatal unit and to evaluate the yield of current screening practices with the aim of proposing a more targeted, risk-based screening approach.

Methods:
A retrospective cohort study was conducted of all neonates admitted to the neonatal unit of Hospital Sultanah Bahiyah, Alor Setar, Kedah between January 2015 and March 2025 who underwent congenital infection screening. Data collected included demographics, clinical indications for screening, laboratory results, and final confirmed diagnoses. Descriptive analysis was performed to calculate screening yields and incidence rates.

Results:
A total of 1,282 neonates underwent screening over the 10-year period. The overall incidence of congenital infections was 0.0935 per 1,000 live births (10 cases among 107,000 live births), corresponding to 0.78% among those screened. SGA accounted for the most indication for screening (46.9%), but the yield of congenital infections in this group was notably low at 0.17%. A higher yield was however observed in neonates screened due to clinical findings or abnormal maternal serology. Congenital cytomegalovirus (CMV) topped the list of confirmed infections, accounting for 6 out of the 10 cases identified. False-positive serology results related to post-vaccination hepatitis B exposure were identified in a subset of infants.

Conclusions:
Universal screening of SGA neonates for congenital infections demonstrated a low diagnostic yield. These finding supports a more targeted screening strategy, prioritizing clinical findings and maternal risk factors to enhance diagnostic accuracy.

Keywords:

congenital infections, neonates, CMV, Toxoplasmosis, SGA

Abstract ID: A-0054

Status:	Format of Presentation:	Abstract Category:	Format of Study:
Short-listed for Best Poster	Poster	Neonatal	Research Study

Abstract Title:

Red Blood Cell Transfusion and Short-Term Outcome Among Very Low Birthweight Infant - a Retrospective Cross-Sectional Study

Authors & Institutions:

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Abstract Text:

Background:
Preterm infants often develop anaemia due to immature haematopoiesis and iatrogenic phlebotomy. As a result, red blood cell (RBC) transfusion is common in this population. However, RBC transfusion carries potential risks. Studies have linked it to short-term complications such as mortality, bronchopulmonary dysplasia (BPD), retinopathy of prematurity (ROP), necrotizing enterocolitis (NEC), and sepsis.

Objectives:
To analyze the relationship between RBC transfusion and outcomes including mortality, bronchopulmonary dysplasia (BPD), necrotizing enterocolitis (Bell's Stage II and above), culture-positive sepsis, and severe retinopathy of prematurity (ROP Grade 3) among very low birth weight (VLBW) infants <1500g.

Methodology:
This is a retrospective cross-sectional study involving all VLBW infants <1500g born between 1 January 2022 and 31 December 2023 at Hospital Tunku Azizah Kuala Lumpur. Hospital Information System (HIS) records of the study population were reviewed. Data were entered into SPSS version 27. Quantitative variables were compared using the Student's t-test (parametric) or Mann–Whitney U test (non-parametric). Categorical variables were compared using the Chi-square or Fisher's exact test.

Results:
A total of 363 infants were included in the study. Of these, 153 (42%) received at least one RBC transfusion during their neonatal admission. RBC transfusion was significantly associated with an increased risk of mortality (Risk Ratio [RR] 1.86, $p = 0.004$) and BPD (RR 2.99, $p < 0.001$). It was also associated with a higher risk of NEC (Bell's Stage II and above), culture-positive sepsis, and severe ROP (Grade 3).

Conclusion:
Our study shows that RBC transfusion is significantly associated with adverse clinical outcomes in VLBW preterm infants. However, this association may not indicate causality. Rather, the need for transfusion may reflect unmeasured factors such as underlying disease severity that contribute to poor outcomes in this population.

Keywords:

Neonatology, RBC transfusion, Outcome, Bronchopulmonary Dysplasia, Mortality, NEC, ROP, Sepsis

Abstract ID: A-0055

Status:	Format of Presentation:	Abstract Category:	Format of Study:
Accepted	Poster	Neonatal	Case Report

Abstract Title:

Metabolic Mayday: A Neonatal Collapse Secondary to Carnitine Palmitoyl Transferase II Deficiency

Authors & Institutions:

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Abstract Text:

Background:
Inborn errors of metabolism (IEMs) may present as a rare but important cause of critical neonatal collapse. Fatty acid oxidation disorders, such as Carnitine Palmitoyl Transferase II (CPT2) deficiency, can result in hypoketotic hypoglycaemia, cardiomyopathy and less commonly seizures. Early identification and treatment are vital to prevent mortality and long-term morbidity.

Report:
A term male newborn was delivered via spontaneous vaginal delivery without perinatal complications with birth weight of 2.5kg. Antenatal issue was maternal diabetes on insulin therapy and parents who are first cousins. After delivery, he developed respiratory distress and was treated for congenital pneumonia. Feeding was initiated shortly after admission and tolerated well. At day 6 of life, he was found in collapsed state with glucose of 1.6mmol/L. Following cardiopulmonary resuscitation, he achieved return of spontaneous circulation. However, he developed recurrent seizures and persistent metabolic acidosis with elevated serum lactate and ammonium levels. Metabolic team consult was obtained and an urgent IEM screening was sent which revealed CPT2 Deficiency.
His condition was stabilised via correction of acidosis, respiratory support and high concentration glucose infusion. He was concurrently started on special infant formula (Novo Hi-MCT) as well as oral carnitine. The infant progressed well with appropriate weight gain and was subsequently transferred to Metabolic Unit Hospital Tunku Azizah for continuation of care.

Conclusion:
CPT2 deficiency, although rare, should be considered in cases of sudden neonatal collapse. CPT2 deficiency impairs the mitochondrial β-oxidation of long-chain fatty acids, critical during periods of fasting or metabolic stress. In neonates, this can rapidly lead to energy failure, hypoglycaemia, cardiac arrhythmias, and sudden death if untreated. Management focuses on maintaining normal glucose level and long-term dietary modifications. Prompt recognition and high clinical suspicion of IEM is critical in preventing metabolic crises and improving outcome.

Keywords:

Inborn error of metabolism, CPT2 Deficiency, Neonatal Collapse, Fatty acid oxidation

Abstract ID: A-0056

Status:	Format of Presentation:	Abstract Category:	Format of Study:
Accepted	Poster	Neonatal	Case Report

Abstract Title:

Congenital Hypothyroidism with Necrotizing Enterocolitis in a Newborn Treated with Intravenous L-Thyroxine: A Case Report

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Abstract Text:

Introduction:
Congenital hypothyroidism (CH) is a common neonatal endocrine disorder, and if untreated, can lead to irreversible neurodevelopmental deficits. Necrotizing enterocolitis (NEC) is a severe gastrointestinal emergency predominantly seen in preterm infants. Its occurrence in term neonates is rare and often linked to perinatal risk factors. The coexistence of CH and NEC is uncommon and presents unique therapeutic challenges

Case Report:
We report a case of a term male neonate born to a mother with overt diabetes mellitus. Birth was complicated by shoulder dystocia due to macrosomia (3.8 kg). Although initially stable, he developed respiratory distress requiring ventilation for two days. On day 7 of life, the infant developed vomiting and abdominal distension. Imaging was suggestive of NEC, and intravenous antibiotics were initiated. Despite medical therapy, the infant's condition worsened, with increasing abdominal discoloration and sepsis. He underwent laparotomy on day 17 of life, revealing perforated NEC. Concurrently, newborn screening revealed markedly elevated cord TSH (285.85 IU/L) with low T4 (8.09 pmol/L), and repeated thyroid function test on day 7 of life confirmed CH (TSH 341.69 IU/L, T4 <5.41 pmol/L). Due to impaired gut function, oral levothyroxine was not viable. Intravenous thyroxine was initiated on day 10 of life. The infant achieved a euthyroid state by day 23 of life and transitioned to oral therapy by day 28 of life after full enteral feeding was reestablished.

Conclusion: Thyroid hormone deficiency may contribute to impaired gut motility and mesenteric perfusion, predisposing to NEC. In cases where enteral absorption is compromised, intravenous thyroxine is a critical therapeutic option. Early recognition and appropriate hormone replacement are essential to optimize outcomes.

Keywords:

congenital hypothyroidism, intravenous thyroxine, necrotising enterocolitis, NEC

Abstract ID: A-0057

Status:	Format of Presentation:	Abstract Category:	Format of Study:
Accepted	Poster	Neonatal	Case Report

Abstract Title:

Not All That Desaturates is Hypoxic: A Rare Presentation of Hb Little Venice in a Newborn

Authors & Institutions:

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Abstract Text:

Background:
Cyanosis in term neonates often raises concerns for critical cardiopulmonary pathology. However, non-cardiopulmonary causes must also be considered, especially when there is discordance of arterial oxygen levels and saturation.

Case Presentation:
We describe a term baby who was born well to a multiparous mother with an uneventful antepartum course. Baby was ventilated at birth due to cyanosis. There was a huge discordance of PaO2 and SpO2. Echocardiography excluded structural cardiac defects. Blood investigation ruled out methemoglobinemia. He was extubated on day 2 of life but required multiple packed cell transfusion thereafter due to ongoing haemolysis. DNA Analysis taken at 3 months of age identified the presence of an abnormal haemoglobin variant, Hb Little Venice. DNA Analysis of both parents are normal.

Conclusion:
Haemoglobin variants like Hb Little Venice, Hb M variants are important differentials in neonates with discordance of arterial oxygen level and saturation, apart from dyshaemoglobinemia such as methemoglobinemia. Recognising the pattern of 'saturation-gap' helps avoid misdiagnosis of hypoxic conditions and guides appropriate management.

Keywords:

cyanosis, Hb Little Venice

Abstract ID: A-0058

Status:	Format of Presentation:	Abstract Category:	Format of Study:
Accepted	Poster	Neonatal	Case Report

Abstract Title:

Forceps and Fragility: Managing Neonatal Head Injuries in Challenging Deliveries

Authors & Institutions:

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Abstract Text:

Introduction:
Birth injuries refer to neonatal physical injuries occurring during labour and delivery. Though rare, intracranial injuries are among the most severe complications, especially in instrumental deliveries. Chong (2022) highlights acute subdural haemorrhages and cranial fractures as critical concerns, while Karlsen et al. (2019) emphasize risks of intracranial injuries associated with instrumental deliveries. Allen and Baskett (2020) advocate evidence-based and patient-centred approaches to minimize trauma. This report reviews three cases of neonatal head injuries following forceps-assisted deliveries, focusing on management and outcomes.

Case Reports:

Case 1 – NA, delivered at 38 weeks with foetal bradycardia, antenatally complicated by gestational diabetes and hypertension. At birth, resuscitation and intubation were required. Clinical findings included corneal cloudiness, periorbital bruising, facial lacerations, and intraretinal haemorrhages. Imaging revealed acute subdural haemorrhages, depressed occipital fractures, displaced skull fragments, and cephalohematoma. NA was managed by multidisciplinary approach alongside neuroimaging and parental counselling. Subsequently, discharged with ophthalmology, paediatrics, and neurosurgical follow-ups.

Case 2 - NB, delivered at 38+1 weeks for foetal bradycardia, developed respiratory distress requiring CPAP support. Examination noted multiple forceps marks, a frontal indentation, and cranial asymmetry. Imaging revealed acute subdural haemorrhages, sulcal effacement, lambdoid suture diastasis, and cranial fractures. Care focused on respiratory support, neuroprotection, craniofacial assessment, and parental counselling. NB was discharged well with neurosurgical and paediatric follow-ups.

Case 3 - NC, a preterm infant delivered at 33 weeks via emergency Caesarean section with forceps extraction for foetal distress. Findings included facial, scalp, chest, and limb bruises. CT brain showed acute subdural haemorrhages with subarachnoid and cerebellar tentorium extension, bilateral fronto-parieto-temporal subdural effusions, and left parietal fracture. Management included neuroimaging, respiratory and neuroprotection strategies, craniofacial monitoring, and parental counselling. NC remained under multidisciplinary follow-up.

Conclusion:
Timely multidisciplinary management is crucial in neonatal head injuries following difficult deliveries. Prompt intervention significantly reduces long-term morbidity and improves neonatal survival outcomes.

Keywords:

Neonatal head injuries, birth trauma, instrumental deliveries, intracranial haemorrhage, skull fracture

Abstract ID: A-0059

Status:	Format of Presentation:	Abstract Category:	Format of Study:
Accepted	Poster	Neonatal	Case Report

Abstract Title:

A Rare Case of Bladder Exstrophy and Epispadias Complex and Mayer-Rokitansky-Küster-Hauser Syndrome.

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Abstract Text:

Introduction:
Bladder exstrophy and epispadias complex (BEEC) is a rare congenital malformation of the genitourinary system, often associated with other anomalies.

Case Description:
We report a rare case of a term newborn with multiple congenital anomalies, including bladder exstrophy, ambiguous genitalia, and myelomeningocele, which were undiagnosed antenatally. The baby was delivered at term via spontaneous vertex delivery and presented with a lower abdominal wall defect and bladder exstrophy. Ambiguous genitalia were noted, and karyotyping revealed a normal female genotype. Pelvic MRI showed an underdeveloped female reproductive system, and a failed hearing assessment was consistent with type II Mayer-Rokitansky-Küster-Hauser (MRKH) syndrome. The baby also had a myelomeningocele at the L5/S1 level, with a low-lying tethered cord and syringomyelia. Plans were made for neurosurgical intervention and later reconstructive surgery of the bladder and genitalia.

Discussion:
BEEC is a rare condition affecting the genitourinary, gastrointestinal, and musculoskeletal systems. Cloacal exstrophy (OEIS syndrome) is the most severe form of BEEC, characterized by omphalocele, cloacal exstrophy, imperforate anus, and spinal defects. These are among the most severe urologic birth defects due to their significant impact on urinary continence, sexual function, increased risk of recurrent urinary tract infections, and potential renal impairment. BEEC and MRKH syndrome are distinct congenital anomalies that can co-occur due to shared embryological origins. Both conditions may also be associated with other anomalies, including spinal dysraphism. Although challenging, antenatal diagnosis is possible with detailed foetal scanning. Management is complex and requires a multidisciplinary approach to address the anatomical, functional, cosmetic, reproductive, sexual, and psychological aspects of care.

Keywords:

Bladder exstrophy and epispadias complex, Mayer-Rokitansky-Küster-Hauser syndrome, ambiguous genitalia, myelomeningocele

Abstract ID: A-0060

Status:	Format of Presentation:	Abstract Category:	Format of Study:
Accepted	Oral	Neonatal	Research Study

Abstract Title:

A Three-Year Retrospective Review of Persistent Pulmonary Hypertension of the Newborn (PPHN) treated with Inhaled Nitric Oxid in a District Specialist Hospital in Perak

Authors & Institutions:

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Abstract Text:

Background:
Inhaled nitric oxide (INO) is a well-established and widely used therapy in the management of persistent pulmonary hypertension of the newborn (PPHN). While its role in improving oxygenation is well established, there is limited research on the clinical characteristics, outcomes, and associated factors in response to INO in this region.

Objectives:
This study aims to describe the clinical characteristics and outcomes of neonates with PPHN treated with INO, and to identify factors associated with successful INO therapy in a district specialist hospital in Perak.

Methods:
This retrospective cross-sectional study collected data from newborns with PPHN who received INO treatment in a tertiary hospital in Perak from 1st January 2022 to 31st December 2024. Chi square or Fisher exact test and independent t-test were used to analyse the factors associated with the outcome of INO therapy with statistical significance $p<0.05$.

Results:
Forty-two newborns with PPHN received INO therapy during the study period. The survival rate among those treated with INO was 69.0%. However, the high mortality rate observed was not attributed to treatment failure, but rather to other factors such as septicaemia and congenital structural anomalies. Key factors associated with a positive response to treatment included the use of adjuvant therapy, a longer duration of inotropic support, early initiation of INO therapy, and the type of ventilation used. In contrast, the presence of congenital heart disease and early initiation of high-frequency oscillatory ventilation (HFOV) due to ventilation difficulties were associated with higher mortality.

Conclusion:
INO therapy was effective in improving outcomes for neonates with PPHN, particularly when initiated early and supported with adjuvant therapies and appropriate ventilation. These findings underscore the importance of individualized treatment strategies and timely interventions in optimizing the management of PPHN.

Keywords:

Persistent pulmonary hypertension of the newborn; Inhaled nitric oxide; Neonate

Abstract ID: A-0061

Status:	Format of Presentation:	Abstract Category:	Format of Study:
Accepted	Poster	Neonatal	Case Report

Abstract Title:

A Startling Discovery: A Case of Hereditary Hyperekplexia Associated with ATAD1 Mutation

Authors & Institutions:

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Abstract Text:

Background:
Hereditary hyperekplexia type 4 (HKPX4) is a rare genetic disorder characterised by neonatal-onset generalised hypertonia with little to no spontaneous movement and exaggerated startle reflex from birth. HKPX4 is most commonly associated with mutations in the GPHN gene (encoding gephyrin) or the ATAD1 gene (ATPase family AAA domain- containing protein 1).

Case presentation:
We report a case of a term baby girl born via EMLSCS for foetal distress, who presented immediately after birth with diffused hypertonia, pronounced stiffness and exaggerated startle reflex. She was born to a pair of a healthy non-consanguineous "*Orang Asli*" young couple and is their first child. Neurological examination revealed normal alertness but marked fisting, generalised hypertonia and spasms which were exacerbated upon handling. Septic workup, neuroimaging and EEG were unremarkable. Whole exome sequencing sent at 3 months old identified ATAD1 gene mutation which is consistent with diagnosis of HKPX4. Baby was discharged home with Benzhexol and Baclofen.

Conclusion:
Hyperekplexia is one of the rare differential diagnoses of a stiff newborn. Genetic testing plays a critical role in confirming rare gene mutations such as ATAD1 for diagnosis. Due to its rarity, long term outcome of ATAD1-related hyperekplexia is limited.

Keywords:

Hereditary Hyperekplexia, ATAD1

Abstract ID: A-0063

Status:	Format of Presentation:	Abstract Category:	Format of Study:
Accepted	Poster	Neonatal	Case Report

Abstract Title:

Discordant Toxoplasmosis Infection in a Dichorionic Diamniotic Twins Pregnancy: A Case Study

Authors & Institutions:

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Abstract Text:

Background
Congenital toxoplasmosis (CT) is a parasitic infection transmitted vertically during pregnancy, with clinical presentations ranging from asymptomatic to severe neurological impairment. Discordant CT in dizygotic twins is rare. We presented a case of discordant CT in dichorionic diamniotic (DCDA) twins.

Case report
A set of 35-week gestation DCDA twins were delivered via emergency caesarean section due to premature labour contraction. Antenatally, no structural anomalies were detected in either foetus. Both neonates were admitted to the neonatal intensive care unit for standard prematurity management.
The first twin, a male infant, was noted to be asymmetrically small for gestational age. A cranial ultrasound revealed marked dilatation of the bilateral lateral and third ventricles, raising suspicion for obstructive hydrocephalus. Subsequent computed tomography of the brain confirmed non-communicating hydrocephalus with intracranial calcifications, findings suggestive of a congenital infection.

TORCH screening revealed positive IgM for *Toxoplasma gondii*. The diagnosis of congenital toxoplasmosis was confirmed via polymerase chain reaction testing of the cerebrospinal fluid. A retrospective maternal history uncovered exposure to domestic cats and consumption of undercooked meat during pregnancy. Maternal Toxoplasma IgG was also positive, supporting a likely infection during the pregnancy.

The affected infant was initiated on clindamycin, pyrimethamine, and folinic acid. However, he developed seizures during the course of treatment and showed a poor clinical response. Clindamycin was subsequently replaced with sulfadiazine, which led to improved disease control. He was discharged without active seizures and is currently under neurological follow-up.
The second twin remained asymptomatic throughout hospitalization. Serologic testing for toxoplasmosis was negative, and there were no clinical or radiological signs of infection. The infant was discharged in good condition and remains under routine developmental surveillance, with no complications reported to date.

Conclusion:
Early recognition of congenital toxoplasmosis is essential for timely intervention and improved clinical outcomes.

Keywords:

congenital toxoplasmosis

Abstract ID: A-0064

Status:	Format of Presentation:	Abstract Category:	Format of Study:
Accepted	Poster	Neonatal	Research Study

Abstract Title:

Outcome of MDR *Acinetobacter Baumannii* Outbreak Following an Improved Bundle Care Approach in the Neonatal Intensive Care Unit, Hospital Raja Perempuan Zainab II

Authors & Institutions:

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Abstract Text:

Background:
An outbreak of multidrug-resistant *Acinetobacter baumannii* (MDR Ab) in the Neonatal Intensive Care Unit (NICU) poses a serious threat, with high potential for mortality and morbidity. A standard ventilator-associated pneumonia (VAP) bundle had been in use in our NICU, comprising hand hygiene, head elevation, daily equipment changes, oral care, buccal colostrum, infusion feeding, ventilator circuit care, and biweekly endotracheal tube changes. Despite adherence, MDR Ab outbreaks persisted. In October 2024, the care protocol was revised to include Kangaroo Mother Care and stricter compliance with bundle care practices every 4 hours instead of once per shift.

Objectives:
To assess the impact of the revised bundle care checklist on MDR Ab infections among NICU babies at Hospital Raja Perempuan Zainab II.

Methods:
This retrospective cohort study reviewed infants admitted to the NICU with MDR Ab identified from blood or tracheal samples between October 2023 and April 2025. Data were analysed before and after the revised bundle care implementation, using records from Infectious Disease Unit and patient folders.

Results:
Prior to the revised bundle care (Oct 2023–Sept 2024), 30 infants tested positive for MDR Ab, with 10 deaths and 7 confirmed via blood culture. After the new bundle care strategy was introduced (Oct 2024–Apr 2025), cases dropped significantly to 11 infants, with 2 deaths and only 1 blood culture-confirmed case. No new cases were reported after January 2025.

Conclusion:
The implementation of the revised bundle care significantly reduced MDR Ab infections and associated mortality and morbidity in the NICU.

Keywords:

bundle care, kangaroo mother care, MDR *Acinetobacter baumannii*

Abstract ID: A-0065

Status:	Format of Presentation:	Abstract Category:	Format of Study:
Accepted	Poster	Neonatal	Research Study

Abstract Title:

Targeted Antibiotic Use in Nosocomial Sepsis Cases in the Neonatal Unit of Hospital Seberang Jaya: Pathogen Distribution and Resistance Patterns

Authors & Institutions:

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Abstract Text:

Background:
Nosocomial sepsis defined as infection that occurs in a neonate after 48 hours of admission and is a major cause of morbidity and mortality in neonatal unit. A local study reported incidence of nosocomial sepsis was 3.79 per 1000 admissions and 1.9 per 1000 patients. The most common pathogens were *Klebsiella pneumoniae* (29.4%), followed by coagulase-negative *Staphylococcus* (13.9%) and *Acinetobacter baumannii* (10.1%).2 Understanding the patterns of targeted antibiotic use and antibiotic resistance trends can help optimize patient care. This is the first study aims to identify the common pathogens responsible for nosocomial sepsis and the antibiotics used for treatment in the neonatal unit of Hospital Seberang Jaya.

Objectives:
1. To identify the pattern of targeted antibiotic use in culture-positive nosocomial sepsis.
2. To describe the causative pathogens and their sensitivity patterns.
3. To evaluate the clinical presentation of affected neonates.

Methods:
This is a retrospective observational study will be conducted in the neonatal unit (NICU and SCN) Hospital Seberang Jaya with admission from January to December 2024.
Neonates with nosocomial sepsis (>48 hours after admission) and positive blood cultures who received targeted antibiotics were included. Cases with culture-negative sepsis and incomplete records were excluded.

Data will be extracted from e-antibiotic forms and patient notes, covering demographics, clinical signs, laboratory findings, antibiotic history, and patient outcomes. Data will be analysed using SPSS software with descriptive and inferential statistics. Descriptive statistics will outline common pathogens, antibiotic choices, and resistance patterns. Comparative and inferential statistics (Chi-square, t-test/Mann-Whitney) will assess antibiotic trends and outcomes.

Conclusion:
The study is expected to identify common pathogens and their resistance patterns, guiding appropriate targeted therapy. It will also assess antibiotic adjustments post-culture and clinical outcomes. Results will use to validate the empirical antibiotic policies and improve antimicrobial stewardship.

Keywords:

Neonatal sepsis, Nosocomial infections, Pathogen distribution, Targeted antibiotic therapy, Antibiotic resistance

Abstract ID: A-0066

Status:	Format of Presentation:	Abstract Category:	Format of Study:
Accepted	Poster	Neonatal	Case Report

Abstract Title:

A Curious Curve: Diaphragmatic Eventration in a Neonate with Congenital CMV - Coincidence or Clue?

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Abstract Text:

Background:
Congenital cytomegalovirus (CMV) infection affects approximately 1 in 200 infants. They may commonly present with microcephaly, sensorineural hearing loss, hepatosplenomegaly, thrombocytopenia, and intracranial calcifications. Respiratory manifestations resulting from CMV pneumonitis and diaphragmatic eventration are exceedingly rare in this group.

Case Report:
We present a case of a term female newborn with petechial rashes, hepatosplenomegaly, and microcephaly, noted at birth. She had persistent thrombocytopenia with conjugated hyperbilirubinemia and developed early-onset respiratory distress requiring non-invasive ventilatory support. CMV antibodies were detected at birth, and a confirmatory CMV PCR revealed active infection. Magnetic resonance imaging (MRI) brain was consistent with features of congenital CMV. Antiviral therapy with oral valganciclovir was initiated, however despite clinical improvement, she remained oxygen dependent. Further workup showed radiographic evidence of diaphragmatic eventration, a rare finding that has been reported in a few case reports of congenital CMV. The diaphragmatic dysfunction supports a mechanical component rather than infectious cause for the respiratory distress. This is an important point to note as it may influence ventilatory strategies and prognosis. She tolerated the antiviral therapy without major adverse effects.

Conclusion:
This case highlights the need to consider diaphragmatic dysfunction in neonates with congenital CMV who require prolonged respiratory support. The possible association between CMV and diaphragmatic dysfunction warrants further study, as recognizing such anomalies may influence clinical management and prognosis of these patients

Keywords:

CMV, congenital infections, diaphragmatic eventration.

Abstract ID: A-0067

Status:	Format of Presentation:	Abstract Category:	Format of Study:
Accepted	Poster	Neonatal	Research Study

Abstract Title:

Practice of Daycare Phototherapy Service in District Hospital

Authors & Institutions:

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Abstract Text:

Background:
Neonatal jaundice is a common cause of hospital admission in newborns. Prolonged inpatient stays for phototherapy can place strain on healthcare resources and families. Introducing a daycare-based approach can provide effective treatment while reducing hospital burden.

Report:
Daycare jaundice service can improve the management of neonatal jaundice by reducing hospital stay duration without compromising quality of care. The daycare model involves admitting eligible neonates for phototherapy for a 6-hour session during the day, after which they are discharged home with planned follow-up. This approach contrasts with the traditional 24-hour or longer inpatient admissions

Initial implementation of this service in the district hospital demonstrated a significant reduction in hospital stay duration while maintaining effective jaundice management The model also supports the principles of Baby-Friendly Hospital Initiative (BFHI) by promoting early bonding and breastfeeding.

Conclusion:
Daycare phototherapy is an efficient and family-centered approach to managing neonatal jaundice. It reduces unnecessary hospital stays, optimizes use of healthcare resources, and aligns with baby-friendly hospital standards.

Keywords:

Neonatal jaundice

Abstract ID: A-0068

Status:	Format of Presentation:	Abstract Category:	Format of Study:
Accepted	Poster	Neonatal	Case Report

Abstract Title:

Recurrent Severe Hemolytic Anemia of Fetus and Newborn Secondary to Alloimmune Anti-E Antibodies: A Case Study

Authors & Institutions:

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Abstract Text:

Background:
Haemolytic anaemia of foetus and newborn (HDFN) is a main cause for neonatal anemia and early hyperbilirubinemia. The most likely causes of HDFN are ABO or Rhesus incompatibility. Rarely, other minor blood groups cause HDFN.

Case Report:
A term baby girl was delivered via caesarean section to a blood group O, Rh-positive mother with a history of three miscarriages and one stillbirth. She was admitted for transient tachypnoea of the newborn and found to have anaemia (Haemoglobin level (Hb)11.3 g/dL) and early hyperbilirubinaemia, requiring intensive phototherapy. Otherwise, she did not show any clinical features of sepsis. Physical examination revealed mild pallor with jaundice but there was no dysmorphism, no hepatosplenomegaly, or evidence of bleeding.

Investigations showed haemolytic anemia with a positive direct Coombs test (4+). The infant's blood group was O Rh-positive, phenotype CDe/cDE (R1R2). Maternal testing revealed anti-E antibodies (titer 1:256), confirming HDFN due to anti-E alloimmunization.
She was started on intensive phototherapy and intravenous Immunoglobulin (IVIG)(0.5g/kg). The iinfants's Hb level increased and she was discharged on day 7 of life with Hb13.6g/L.

However, the infant demonstrated only a transient improvement in hemoglobin levels, as she was readmitted on day 14 of life for severe anemia (Hb 6.7 g/dL). The direct Coombs test (DCT) remained strongly positive (3+). She was managed with a partial exchange transfusion and administered a second dose of intravenous immunoglobulin (IVIG). Following treatment, her hemoglobin improved to 15.5 g/dL. She was discharged in stable condition and remains well on follow-up, with no recurrence of anemia or hyperbilirubinemia.

Conclusion
This case illustrates a recurrent HDFN involving minor blood incompatibility, which is rare compared to known literature. High index of suspicious is necessary for recurrent miscarriage during antenatal care for accurate diagnosis and timely treatment to prevent undesired complications.

Keywords:

Neonate, Haemolytic anaemia of foetus and newborn, anti-E alloimmunization

Abstract ID: A-0069

Status:	Format of Presentation:	Abstract Category:	Format of Study:
Accepted	Poster	Neonatal	Case Report

Abstract Title:

From Resuscitation to Palliative Care: A Case of Neonatal Vein of Galen Malformation

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Abstract Text:

Background:
Vein of Galen Malformation (VGM) is a rare and serious congenital vascular anomaly involving abnormal connections between cerebral arteries and the venous system. Early detection and management are crucial to prevent neurological damage or death. This case highlights a neonate with severe VGM presenting with hemodynamic compromise and multiorgan failure.

Case Presentation:
A 22-day-old female neonate, born at 37 weeks via elective Caesarean section due to antenatally detected anomalies (ventriculomegaly, congenital heart anomalies, and polyhydramnios), required resuscitation and intubation at birth due to low oxygen saturation (SpO_2 40–45%). She appeared syndromic with macrocephaly, low-set ears, hypertelorism, and a loud systolic murmur. She was admitted to the NICU with persistent pulmonary hypertension and severe respiratory failure, requiring high ventilatory and inotropic support (dopamine, adrenaline). Abnormal venous flow in cranial ultrasound and echocardiography confirmed a diagnosis of vein of Galen malformation (VGM). Interdisciplinary consultations with paediatric cardiology, neurosurgery, and interventional radiology led to a decision to optimize the patient's hemodynamic status through pulmonary hypertension management and supportive care. Sildenafil and furosemide were initiated to manage pulmonary hypertension and fluid balance. However, despite stabilization efforts, the infant required reintubation due to tachypnoea post-extubation and subsequently developed a nosocomial infection, further complicating her clinical course. On Day 22 of life, after a family conference and discussion with the medical team, the parents opted for palliative care, recognizing the poor prognosis due to multiorgan failure.

Discussion:
VGM is a rare, life-threatening vascular anomaly which requires early diagnosis and prompt management (stabilization hemodynamic status, managing pulmonary hypertension, and possible surgical or interventional treatments) to prevent irreversible neurological damage and organ failure. Prognosis remains poor in severe neonatal cases despite aggressive support. Early imaging and interventional techniques (e.g., embolization) have improved outcomes in selected patients, though surgery remains high-risk in critically ill neonates.

Keywords:

Vein of Galen malformation, neonate

Abstract ID: A-0070

Status:	Format of Presentation:	Abstract Category:	Format of Study:
Accepted	Poster	Neonatal	Case Report

Abstract Title:

The Disguised Cyst: Neonatal Enteric Duplication Cyst confused with an Ovarian Cyst

Authors & Institutions:

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Abstract Text:

Introduction:
Enteric duplication cysts are rare congenital anomalies found along the alimentary tract, most commonly on the mesenteric border of the ileum. These cysts share a common muscular wall and vascular supply with the adjacent bowel. Prenatal detection via ultrasound is possible but limited, with only 20–30% identified antenatally. In female foetuses, distinguishing enteric duplication cysts from ovarian cysts can be particularly challenging due to overlapping sonographic features.

Case Description:
We report the case of a term baby girl admitted to our center following antenatal ultrasound findings of prominent bowel loops, a dilated stomach, and a suspected right-sided ovarian cyst measuring 3.5 × 4 cm. On the second day of life, she developed greenish gastric aspirates and non-bilious vomiting. Postnatal abdominal ultrasound confirmed a persistent intra-abdominal cystic mass. Given her clinical presentation and imaging findings she was referred to tertiary centre for surgical intervention. An exploratory laparotomy was performed. Intraoperatively findings revealed a duodenal duplication cyst. The cyst was successfully excised without complications. The patient had an uneventful recovery postoperatively.

Discussion:
This case underscores the diagnostic challenges in distinguishing enteric duplication cysts from ovarian cysts in utero. While prenatal imaging can provide early clues, definitive diagnosis often requires postnatal evaluation and surgical exploration. Enteric duplication cysts, though rare, should be considered in the differential diagnosis of neonatal abdominal cystic lesions, especially when clinical symptoms such as vomiting or feeding intolerance emerge. Prompt surgical intervention can lead to favourable outcomes.

Keywords:

Enteric Duplication cyst

Abstract ID: A-0071

Status:	Format of Presentation:	Abstract Category:	Format of Study:
Accepted	Poster	Neonatal	Case Report

Abstract Title:

A Rare Case of Methemoglobinemia in a Neonate: Experience in Hospital Tengku Ampuan Afzan, Kuantan,Pahang.

Authors & Institutions:

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Abstract Text:

Background:
Methemoglobinemia is a rare and potentially life-threatening condition in neonates, characterized by the oxidation of haemoglobin to methaemoglobin, which is unable to bind and deliver oxygen effectively. Neonates, particularly those under four months of age, are especially vulnerable due to immature enzymatic systems involved in reducing methaemoglobin levels.

Case Report:
We report the case of a-21day-old male infant who presented with lethargy, cyanosis, and preceding history of loose stool. On admission, he was in compensated shock. Arterial blood gas analysis revealed severe metabolic acidosis (pH 6.77, HCO_3 -5.7) and elevated haemoglobin levels (18%), consistent with symptomatic methemoglobinemia secondary to sepsis. The patient was successfully and managed with intravenous sodium bicarbonate, methylene blue, ventilatory support and antibiotics.

Conclusion:
This case highlights the importance of considering methaemoglobinemia in neonates presenting with unexplained cyanosis and acidosis, especially in the context of sepsis.

Keywords:

methaemoglobinemia

Abstract ID: A-0072

Status:	Format of Presentation:	Abstract Category:	Format of Study:
Accepted	Poster	Neonatal	Research Study

Abstract Title:

An Audit of Early-Onset Neonatal Sepsis and Antibiotic Use in the NICU of Hospital Tunku Azizah, Kuala Lumpur.

Authors & Institutions:

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Abstract Text:

Background:
Early-onset sepsis (EOS) is a critical condition in infants occurring within the first 72 hours of life. Managing EOS with empirical antibiotic contributes to antimicrobial resistance as well as disrupting the developing microbiome. Identifying and reducing unnecessary antibiotic use in EOS is essential for improving neonatal care

Objectives:
To assess predictors of antibiotic necessity as well as the rate and reasons for antibiotic use in infants born at ≥35 weeks' gestation with suspected or at risk of EOS

Methods:
A retrospective audit of NICU admissions for suspected EOS (November to December 2024), evaluating antibiotic prescribing practices in term and near-term infants.

Results:
A total of 233 medical records were reviewed, 89.6% (n=209) presenting with clinical signs of infection. Antibiotics were initiated for neonatal indications (88.8%, n=207) versus maternal risk factors (11.6%, n=26). Only 6 out of 233 blood cultures were positive, with one showing clinically significant growth. 96.1%(n=224) infants received empirical C-penicillin and Gentamicin, with 33% continuing more than 5 days. Antibiotic duration varied, <48 hours (13.7%), 48–72 hours (22.8%), >72 hours (63.5%). 24.6% (n=58) of clinically stable infants had antibiotics continued beyond 48 hours while awaiting negative culture results. Prolonged antibiotic use was also influenced by persistent respiratory issues and abnormal chest radiographs.

Conclusion:
Despite rare confirmed sepsis, prolonged antibiotic use persists due to clinical suspicion. Enhanced risk stratification and culture-guided stewardship are urgently needed to reduce unnecessary antibiotic exposure.

Keywords:

Neonatal Early-Onset Sepsis (EOS), Antibiotics, NICU, term infant, near-term infant

Abstract ID: A-0075

Status:	Format of Presentation:	Abstract Category:	Format of Study:
Accepted	Poster	Neonatal	Case Report

Abstract Title:

Meconium Peritonitis and Pseudocyst, A Rare Cause of Non-Immune Hydrops Fetalis

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Abstract Text:

Background:
Non-immune hydrops fetalis (NIHF) is often a lethal foetal condition with a diverse aetiology. Meconium peritonitis is a rare cause of non-immune hydrops fetalis (NIHF). Leakage of meconium can trigger a fibrotic inflammatory response, leading to pseudocyst formation and if large, can impair venous return resulting in hydrops fetalis. We report a case of NIHF secondary to meconium peritonitis complicated by the formation of meconium pseudocyst.

Case Report:
This is a female infant born at 30 weeks' gestation to a 32-year-old primigravida who was diagnosed antenatally with hydrops fetalis and an intra-abdominal mass. Antenatal scans revealed generalized foetal oedema with ascites, bilateral pleural effusion, pericardial effusions, and a large avascular hypoechoic mass in the foetal abdomen. The baby was delivered via emergency Caesarean section with an Apgar score of $4^{1}6^{5}$ and birth weight of 2050g. She was intubated at five minutes of life due to poor respiratory effort. Postnatally, she presented with generalized oedema, gross abdominal distension with respiratory compromise requiring urgent peritoneal drainage and high ventilatory support. Following stabilization, she underwent exploratory laparotomy, bowel resection and ileostomy at day 8 of life. Intra-operatively, dense adhesions, dilated and inflamed small bowels with bowel perforation 60cm from the duodenojejunal junction forming meconium pseudocyst and microcolon were identified. Post operatively, she required high-frequency oscillatory ventilation (HFOV) for persistent respiratory acidosis which was eventually weaned to conventional ventilation and extubated. Peritoneal cultures grew Extended-Spectrum Beta-Lactamase *Klebsiella aerogenes*, treated successfully with meropenem and vancomycin. Histopathology findings of the small bowel revealed intestinal duplication cyst with serositis and microcalcifications. Chromosomal analysis, TORCHES and haemolysis screens were unremarkable. Whole exome sequencing was sent for further evaluation.

Conclusion:
This case highlights meconium pseudocyst as a rare but important differential diagnosis of NIHF. Early antenatal suspicion coupled with prompt multidisplinary management is essential to ensure an optimized outcome.

Keywords:

hydrops fetalis, meconium peritonitis, meconium pseudocyst

Abstract ID: A-0076

Status:	Format of Presentation:	Abstract Category:	Format of Study:
Accepted	Poster	Neonatal	Case Report

Abstract Title:

Case Reports of Congenital Toxoplasmosis in Segamat Hospital

Authors & Institutions:

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Abstract Text:

Background:
Congenital toxoplasmosis, resulting from vertical transmission from infected mothers with protozoa Toxoplasma gondii, is a significant cause of morbidity and mortality in foetuses and neonates. It can be transmitted through contaminated food, water, or contact with cat faeces. Approximately 10 to 30 percent of infants with congenital toxoplasmosis have clinical features. The severity depends on gestational age at infection, with early infections often leading to severe complications, including chorioretinitis, hydrocephalus, intracranial calcifications, and neurodevelopmental impairment.

Case report:
We are reporting 2 severe cases of congenital toxoplasmosis during neonatal period in Segamat Hospital. Both mothers of cases had close exposure to cats during pregnancy.

Case 1 - Baby A was born preterm (32 weeks gestation), birth weight 2.19kg (appropriate for gestational age). She showed severe symptomatic infection with multiorgan involvement comprised hydrocephalus, blueberry muffin rashes, hepatosplenomegaly, large patent ductus arteriosus and chorioretinitis. She passed away at day 2 of life.

Case 2 - Baby B was born term with birth weight 1.97kg (symmetrical small gestational age). He had intracranial involvement, thrombocytopenia and liver impairment. He was treated as congenital toxoplasmosis and CMV infection. He received intensive and prolonged treatment. He survived but had profound hearing loss and developmental delay. Currently, he is 2 years old receiving multidisciplinary interventions.

Discussion:
Intrauterine infection such as congenital toxoplasmosis and CMV infection can cause significant morbidity and mortality. All pregnant mothers should be informed regarding risk of congenital toxoplasmosis from exposure to cat's faeces. All foetuses and newborns with maternal antenatal exposure to cats, especially those with intrauterine growth retardation, should be screened for congenital malformations and congenital infections.

Keywords:

Congenital Toxoplasmosis

Abstract ID: A-0077

Status:	Format of Presentation:	Abstract Category:	Format of Study:
Short-listed for Best Poster	Poster	Neonatal	Research Study

Abstract Title:

The Use of Neonatal Sequential Organ Failure Assessment Score to Predict Mortality and Morbidity in a Tertiary Centre in Sabah

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Abstract Text:

Background:
Neonatal mortality continues to pose a significant public health challenge globally, particularly in developing nations such as Malaysia. Despite advancements in neonatal intensive care, timely identification of critically ill neonates remains crucial to reduce adverse outcomes. Early recognition of organ dysfunction allows for prompt interventions, improving survival and long-term health. Among various scoring systems, the Neonatal Sequential Organ Failure Assessment (nSOFA) score has emerged as a promising tool for predicting morbidity and mortality in neonates. However, its applicability and reliability in Malaysian clinical settings have yet to be comprehensively evaluated.

Objective:
This study aims to determine the predictive validity of the nSOFA score in forecasting neonatal mortality and morbidity in a tertiary hospital setting in Sabah, Malaysia.

Methods:
A prospective cohort study was conducted in the Level 3 Neonatal Intensive Care Unit (NICU) of Sabah Women and Children Hospital, involving neonates admitted between January and April 2025. The nSOFA score was calculated at admission and again at 24 hours for both new admissions and transfer-in cases. Clinical outcomes were recorded on day 28 of life to assess mortality and morbidity. Statistical analyses, including receiver operating characteristic (ROC) curves and sensitivity/specificity evaluations, were performed to assess the predictive performance of the score.

Results:
Preliminary findings suggest that the nSOFA score has reliable predictive accuracy in identifying neonates at high risk for mortality and morbidity. These results are consistent with previous international studies, supporting its utility in diverse clinical environments.

Conclusion:
The nSOFA score appears to be a valuable tool for early risk stratification in critically ill neonates in Malaysian NICUs. Its implementation may support more informed clinical decision-making and resource allocation, potentially improving neonatal outcomes and contributing to broader healthcare policy development.

Keywords:

nSOFA, neonatal mortality prediction

Abstract ID: A-0078

Status:	Format of Presentation:	Abstract Category:	Format of Study:
Short-listed for Best Poster	Poster	Neonatal	Research Study

Abstract Title:

Clinical Audit on Screening of Congenital Hypothyroidism in Paediatric Department Hospital Tuanku Fauziah

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Abstract Text:

Introduction:
Congenital hypothyroidism (CH) is the most common congenital endocrine disorder, and most common preventable cause of mental retardation in children. This audit evaluates the effectiveness of the screening process for CH in our department.

Methodology:
A retrospective review of workflow and medical records was conducted, covering all newborns screened for CH from January to June 2024. Primary outcome was identifying number of neonates with abnormal/rejected cord TSH(cTSH) that had a follow up with repeat thyroid function test (TFT) by 1 week of life .Secondary outcomes included number of affected neonates who had a complete clinical evaluation at 2 weeks of life .

This audit uses the Consensus Guidelines on Screening, Diagnosis, and Management of Congenital Hypothyroidism in Malaysia as a benchmark. Department consensus is that all newborns with rejected or abnormal cTSH must be screened with a repeat TFT by 1 week of life and have a complete clinical evaluation by 2 weeks of life .

Results:
Only 62% of neonates with rejected or abnormal cTSH had a follow up with a repeat TFT by 1 week of life ,while only 58 % had a review by 2 weeks of life, with most have them having incomplete clinical evaluation .

Interventions
An interdepartmental meeting between the Paediatric and Pathology Departments was conducted to revise the workflow for communicating abnormal cord blood thyroid-stimulating hormone (cTSH) results. A standardized flowchart and checklist were developed and implemented to guide clinical review and ensure consistency. A dedicated **CORD TSH Team** was established to oversee the screening process, enhance documentation, and facilitate patient recall through tagging of paediatric case notes.
To support implementation, a departmental Continuing Medical Education session was organized to highlight relevant Clinical Practice Guidelines and introduce the new workflow and checklist to all clinical staff.

Outcome:
In reaudit post interventions, all patients with abnormal/rejected cord TSH were meeting the set standards set by department.

Keywords:

Congenital Hypothyroidism

Abstract ID: A-0079

Status:	Format of Presentation:	Abstract Category:	Format of Study:
Accepted	Poster	Neonatal	Case Report

Abstract Title:

Microvillus Inclusion Disease: A Case Report and Review of Management Challenges

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Abstract Text:

Background:
Microvillus inclusion disease (MVID), is a rare autosomal recessive disorder characterized by early onset secretory diarrhoea and profound malabsorption leading to severe dehydration and failure to thrive, typically presenting during neonatal period. The condition is frequently associated with consanguinity and carries significant diagnostic and management challenges due to its rarity and complexity. Early diagnosis is crucial due to the life-threatening nature of the condition and the need for lifelong nutritional support.

Case Report:
We report a case of a term neonate with antenatal bowel dilatation and polyhydramnios indicating intra-uterine diarrhoea. Parents are consanguineous with early neonatal demise of firstborn due to suspected bowel pathology. Her clinical course was characterised by recurrent mixed secretory and osmotic diarrhoea whenever feeding exceeded 40ml/kg/day with metabolic acidosis, septic episodes and growth failure. Extensive investigations, including serial abdominal imaging, metabolic screening and immunological workups were inconclusive. Given her persistent diarrhoea, growth failure, and consanguinity, congenital diarrhoea and enteropathies (CODE) was suspected. Whole exome sequencing (WES) revealed homozygous mutation in syntaxin 3 (STX3) gene, confirming the diagnosis of MVID. She also has retinal involvement leading to a syndrome with both intestinal and retinal involvement. She is currently on specialized nutritional rehabilitation and training for home parenteral nutrition.

Conclusion:
This case illustrates the diagnostic challenges and management complexity of CODE, emphasizing the importance of early clinical diagnosis in neonates presenting with secretory diarrhoea, consanguinity and failure to thrive. Genetic testing plays a pivotal role in confirming the diagnosis. Management remains supportive, centered on nutritional rehabilitation, while long-term survival may require intestinal transplantation. Early referral to a specialized center with multidisciplinary expertise is crucial in optimizing outcomes in these patients.

Keywords:

Congenital diarrhoea and enteropathies (CODE), microvillus inclusion disease, congenital diarrheal disorders, enteropathies, whole exome sequencing, syntaxin 3

Abstract ID: A-0080

Status:	Format of Presentation:	Abstract Category:	Format of Study:
Accepted	Poster	Neonatal	Case Report

Abstract Title:

Intravenous Immunoglobulin in *Human Parechovirus* Neonatal Meningitis: A Case Report.

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Abstract Text:

Background:
Human Parechovirus (HPeV) is increasingly recognized as a significant viral pathogen in neonates and young infants, contributing to rising morbidity and mortality. It is an emerging cause of sepsis-like illness and meningitis in this population. Among the 19 identified serotypes, HPeV-1 and HPeV-6 are typically associated with mild respiratory and gastrointestinal symptoms, while HPeV-3 is more commonly linked to severe central nervous system involvement in neonates.

Case Report:
We report the case of a 9-day-old female neonate who presented with high-grade fever, vomiting, poor feeding, and reduced activity. She required extensive fluid resuscitation with multiple boluses and non-invasive ventilation (NIV) for respiratory support. Due to the clinical suspicion of bacterial meningitis, empirical broad-spectrum antibiotics were initiated. Laboratory findings revealed leukopaenia with a normal C-reactive protein (CRP). Lumbar puncture was performed, and cerebrospinal fluid (CSF) multiplex PCR testing detected Human Parechovirus (HPeV). She was diagnosed with HPeV meningitis and showed marked clinical improvement following treatment with intravenous immunoglobulin (IVIG).

Conclusion:
HPeV, particularly HPeV-3, should be considered in diagnosing neonatal sepsis and meningitis, especially when the septic parameters and bacterial cultures are negative. Early recognition through molecular diagnostics is crucial for prompt diagnosis and to avoid unnecessary investigations and antibiotic use. This case also highlights the potential role of IVIG in the management of severe neonatal HPeV meningitis.

Keywords:

Human Parechovirus, HPeV-3, Neonatal Meningitis, Sepsis-like Illness, Intravenous Immunoglobulin

Abstract ID: A-0081

Status:	Format of Presentation:	Abstract Category:	Format of Study:
Accepted	Poster	Neonatal	Case Report

Abstract Title:

Fibromatosis Colli in a Premature Infant: A Case Report of an Unusual Neonatal Neck Swelling

Authors & Institutions:

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Abstract Text:

Background:
Fibromatosis Colli (FC), also known as sternocleidomastoid pseudotumor of infancy, is a rare, benign condition characterized by a localized fibroblastic proliferation within the sternocleidomastoid (SCM) muscle. It most commonly arises during the perinatal period, often related to birth trauma or intrauterine malpositioning of the foetal head during the third trimester or delivery. Clinically, FC presents as a firm, painless swelling in the neck within the first few weeks of life and is frequently associated with congenital muscular torticollis. Neck ultrasound is the preferred diagnostic tool, showing a fusiform enlargement of the SCM with preserved muscle striations. Management is typically conservative, focusing on physical therapy and observation. Most cases resolve spontaneously over several months, and surgical intervention is rarely required.

Case Report:
We report a case of Fibromatosis Colli (FC) in a premature infant born at 30 weeks of gestation, who developed right-sided neck swelling and torticollis at 3 weeks of age in the Neonatal Intensive Care Unit (NICU). Clinical examination revealed a firm, non-tender mass at the middle aspect of the right sternocleidomastoid (SCM) muscle, without any signs of local or systemic infection. A neck ultrasound confirmed the diagnosis, demonstrating a fusiform enlargement of the right SCM muscle with preserved architecture, consistent with Fibromatosis Colli. The infant was managed conservatively, with physiotherapy and clinical observation. Over the subsequent months, the neck swelling gradually regressed, and the torticollis resolved completely, with no recurrence noted.

Conclusion:
Fibromatosis Colli is a rare, benign condition that should be considered in the differential diagnosis of neonatal neck masses, particularly when associated with torticollis. Early recognition and confirmation with ultrasound can prevent unnecessary investigations and interventions. As demonstrated in this case, conservative management with physiotherapy is effective, and spontaneous resolution can be expected in most cases, even in premature infants.

Keywords:

Fibromatosis Colli, Premature infant, Neonatal neck mass, Torticollis, Sternocleidomastoid Muscle

Abstract ID: A-0082

Status:	Format of Presentation:	Abstract Category:	Format of Study:
Accepted	Poster	Neonatal	Case Report

Abstract Title:

Congenital Nephrotic Syndrome Presenting as Non-Immune Hydrops Fetalis - A Case Report

Authors & Institutions:

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Abstract Text:

Background:
Congenital nephrotic syndrome (CNS) is a rare neonatal kidney disorder, characterized by massive proteinuria, hypoalbuminemia, and oedema. Non-immune hydrops fetalis (NIHF) is a clinical condition arising from diverse aetiologies, including cardiac, infectious, renal, haematological, and genetic disorders. This case report discusses a neonate diagnosed with CNS presenting as NIHF.

Case Report:
A male infant was delivered at 36 weeks' gestation due to NIHF, with a birth weight of 3.4 kg. The maternal antenatal history included multinodular goiter and polyhydramnios. Ultrasound at 34 weeks revealed pleural effusion, pericardial effusion, ascites, and scalp oedema. Despite intrauterine pleural tapping being done twice, the neonate presented with significant bilateral pleural effusions and pericardial effusion upon NICU admission. Biochemical analysis of the pleural fluid was transudative in nature but interestingly with time, it became chylous in appearance.
A comprehensive diagnostic workup, including imaging, laboratory tests, and urinalysis, was initiated. TORCH and Parvovirus testing were negative, and blood tests did not suggest haemolytic disease or blood group incompatibility. Persistent elevation in the urine protein-creatinine index (PCI) was noted: 0.65 on Day 1, 0.58 on Day 5, and 0.5 on Day 12, indicating significant proteinuria. These findings, coupled with oedema and hypoalbuminemia, supported a diagnosis of CNS.

The neonate received intravenous albumin and diuretics (amiloride and furosemide), reducing fluid retention, resulting in significant clinical improvement. We observed a spontaneous recovery of serum albumin with declining proteinuria after about 2 weeks, but the latter was transient, and child required resumption of diuretics and ACE inhibitors by CGA 40 weeks. Subsequent genetic testing was sent and at the time of writing, results are still pending.

Conclusion:
In this case, CNS presented with typical features: proteinuria, hypoalbuminemia, and oedema. This case underscores the importance of considering CNS in the differential aetiologies of NIHF.

Keywords:

Congenital nephrotic syndrome, Non-immune hydrops fetalis

Abstract ID: A-0083

Status:	Format of Presentation:	Abstract Category:	Format of Study:
Accepted	Poster	Neonatal	Case Report

Abstract Title:

A Case of Chondromesenchymal Hamartoma of the Chest Wall with Good Prognosis Postoperatively

Authors & Institutions:

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Abstract Text:

Background:
Chondromesenchymal hamartoma of the chest wall (CHCW) is a rare, benign tumour that primarily affects neonates and infants. It originates from the rib and can lead to significant respiratory distress due to its mass effect on the developing lungs. Although benign, its presentation often mimics that of malignant lesions, complicating diagnosis. We present the case of a preterm neonate with chondromesenchymal hamartoma, who experienced a favourable postoperative prognosis.

Case Report:
A preterm male infant, born at 31 weeks, had a good Apgar score and was delivered via spontaneous vertex delivery. Antenatally, the patient presented with polyhydramnios and premature rupture of membranes, with no documented structural anomalies detected.

However, the infant was soon intubated due to respiratory distress. A right lung mass was identified on chest X-ray, prompting further investigation. A Contrast-Enhanced Computed Tomography of the Thorax, Abdomen, and Pelvis (CECT TAP) revealed a tumour originating from the right 2nd rib, presenting as a large solid-cystic mass, likely a mesenchymal hamartoma of the right chest wall. Initially, the patient was managed conservatively with monitoring for tumour progression.
However, the mass began compressing the airway, leading to worsening respiratory function. Therefore, at 34 days of life, the patient underwent a right thoracotomy with excision of the tumour, which extended from the 2nd to the 5th ribs along the posteromedial aspect and into the intrathoracic region. Histopathological examination confirmed the diagnosis of chondromesenchymal hamartoma of the chest wall.

Post operatively, patient required ventilation support for two months and was eventually able to wean off the ventilation support and discharged with room air.

Conclusion:
CHCW is extremely rare tumour that till now only hundred cases were documented in literature. Observation and resection are two approaches typically applied for the management. Our case had posted a good outcome after a surgical intervention.

Keywords:

Neonate, Chondromesenchymal hamartoma

Abstract ID: A-0084

Status:	Format of Presentation:	Abstract Category:	Format of Study:
Accepted	Poster	Neonatal	Case Report

Abstract Title:

Early Neonatal Onset Multiple Acyl-CoA Dehydrogenase Deficiency with Congenital Anomalies: An Unexpected Rare Inherited Metabolic Disorder

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Abstract Text:

Background:
Multiple acyl-CoA dehydrogenase deficiency (MADD), or glutaric aciduria type II, is a rare autosomal recessive disorder caused by mutations in *ETFA*, *ETFB*, or *ETFDH* genes. These mutations impair mitochondrial fatty acid and amino acid metabolism due to defective electron transfer flavoprotein (ETF) or ETF-ubiquinone oxidoreductase. There are 3 phenotypes of MADD: neonatal onset with or without congenital anomalies (Types I and II) and late-onset (Type III). Inherited metabolic disorders (IMDs) may be overlooked in neonates presenting with sepsis-like illness.

Case Presentation:
An early term, small-for-gestational-age female infant presented with sudden postnatal collapse at 18 hours of life associated with hypoglycaemia, respiratory distress, and encephalopathy. Blood gas analysis showed severe lactic acidosis with high anion gap. She was empirically treated for meningitis and investigated for IMDs. Her initial elevated ammonia level of 197 mmol/L resolved without any specific therapy. Urine organic acids and acylcarnitine profile were consistent with MADD. Treatment included high-dose riboflavin, coenzyme Q10, carnitine, and a carbohydrate-rich, fat- and protein-restricted formula. She was also diagnosed to have hypertrophic cardiomyopathy with diastolic dysfunction, lissencephaly with bilateral germinal matrix haemorrhage, and a prominent renal pelvicalyceal system. Her NICU stay was prolonged due to episodic metabolic decompensations, feeding intolerance, and recurrent culture-negative infections. She was discharged on room air at 1 month 21 days of life with perfusor feeds and oral medications.

Conclusion:
Neonatal-onset MADD is a severe disease with a variable presentation. This case highlights the importance of maintaining a high index of suspicion for IMDs in neonates with unexplained collapse, lactic acidosis, or congenital anomalies. MADD is often a fatal metabolic disorder; however early referral to geneticist and prompt, aggressive treatment can significantly alter the course of many other IMDs.

Keywords:

MADD, Multiple Acyl-CoA Dehydrogenase Deficiency, Inherited Metabolic Disorder

Abstract ID: A-0085

Status:	Format of Presentation:	Abstract Category:	Format of Study:
Accepted	Poster	Neonatal	Case Report

Abstract Title:

A Rare Case of Kaposiform Haemangioendothelioma in a Newborn: Diagnostic Challenges and Management

Authors & Institutions:

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Abstract Text:

Background:
Kaposiform hemangioendothelioma (KHE) is a rare, locally aggressive vascular tumour that infiltrates the dermis and subcutaneous tissue. Although non-metastatic, its association with life-threatening complications such as the Kasabach-Merritt phenomenon (KMP) underscores the importance of early recognition and intervention.

Case Presentation:
We report a case of a 37-week gestation male newborn presenting with a violaceous, bluish, mobile swelling measuring 2×1.5 cm over the left posterior triangle of the neck. The mass was firm, compressible, non-tender, non-pulsatile and not warm. Initial ultrasound suggested lesion was consistent with a haemangioma. However, skin biopsy revealed histopathological features of KHE. MRI findings confirmed the lesion involving the cutaneous and subcutaneous layers with abutment of adjacent muscles. Despite its clinical resemblance to a congenital haemangioma, histopathological evaluation confirmed KHE.

Discussion:
According to the 2018 ISSVA classification, KHE is categorized as a locally aggressive or borderline vascular tumour. KHE typically presents as a soft tissue mass with overlying skin changes that may appear as erythematous papules, plaques, or nodules, eventually progressing to an indurated, firm, and violaceous tumour. In cases associated with KMP, the lesions are warm, swollen, and extremely painful. KHE carries a significant risk of KMP, which can lead to severe thrombocytopenia, coagulopathy, and life-threatening bleeding. However, due to the rarity of KHE and limited case reports, it is possible that this patient has a less aggressive form, unlike previously reported cases. Although the lesions on this case report clinically resembled a congenital haemangioma, a skin biopsy confirmed the diagnosis of KHE. Therefore, early diagnosis, close monitoring, and prompt management are essential to improve outcomes and prevent serious complications.

Conclusion:
This case emphasizes the importance of considering KHE in the differential diagnosis of neonatal vascular lesions. Histological confirmation and vigilance for KMP are essential to guide effective management and reduce morbidity.

Keywords:

Kaposiform haemangioendothelioma, Kasabach-Merritt phenomenon, haemangioma, neonate, vascular tumour.

Abstract ID: A-0086

Status:	Format of Presentation:	Abstract Category:	Format of Study:
Accepted	Poster	Neonatal	Case Report

Abstract Title:

Congenital Haemangioma of the Chin: A Rare Presentation

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Abstract Text:

Introduction:
Congenital haemangiomas (CHs) are rare, benign vascular tumours that develop entirely during foetal life and are fully formed at birth. This distinguishes them from infantile haemangiomas (IHs), which typically appear within the first few weeks of life.

Case Description:
A baby boy was delivered at 35 weeks and 4 days of gestation via emergency lower segment Caesarean section due to maternal preeclampsia. The 35-year-old mother had a history of type 2 diabetes mellitus, bronchial asthma, and a prolapsed intervertebral disc. The baby was born vigorous and admitted to the Neonatal Intensive Care Unit for transient tachypnoea of the newborn, requiring nasal prong oxygen.

On examination, the baby was non-dysmorphic with unremarkable systemic findings. However, a pedunculated 4×3 cm mass was noted on the left side of the chin. It was firm, with visible surface vessels and a central area of yellowish-brown discoloration at the base. There were no signs of bleeding or infection. Differentials included teratoma and haemangioma.

Ultrasound of the chin showed a well-defined, heterogeneous, pedunculated lesion measuring 2.7×3 cm, without calcification or cystic components, and with minimal peripheral vascularity on Doppler. Plastic surgery was consulted, and MRI of the brain and face was performed. Imaging revealed a subcutaneous soft tissue mass at the chin with a markedly hyperintense signal on STIR sequences, consistent with a vascular or blood-filled lesion, suggestive of a soft tissue venous malformation.

The baby was discharged in stable condition. The lesion has gradually decreased in size, with no medical intervention apart from the mother's daily olive oil dressing.

Discussion:
This case highlights an uncommon presentation of congenital haemangioma on the chin. While clinical features are often diagnostic, imaging serves as a valuable adjunct in atypical cases. Early multidisciplinary involvement is essential for accurate diagnosis, monitoring, and timely intervention planning.

Keywords:

Haemangioma; Congenital; Neonatal; Chin; Vascular malformation

Abstract ID: A-0087

Status:	Format of Presentation:	Abstract Category:	Format of Study:
Accepted	Poster	Neonatal	Research Study

Abstract Title:

Audit on Neonatal Hypothermia: Prevalence and Risk Factors at Hospital Tunku Azizah Kuala Lumpur

Authors & Institutions:

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Abstract Text:

Introduction:
Neonates who are hypothermic on admission are at increased risk of adverse outcomes. While most studies focus on premature and low birth weight infants, this study aims to determine the incidence of neonatal hypothermia on admission to the Neonatal Intensive Care Unit (NICU) at Hospital Tunku Azizah Kuala Lumpur (HTAKL), and to identify associated maternal, perinatal, and neonatal factors.

Methods:
This retrospective study analyzed newborns admitted to NICU HTAKL from May to December 2024. Admission temperature and maternal-neonatal risk factors were obtained from medical records. Hypothermia was defined as a temperature < 36.5°C. Descriptive statistics described hypothermia incidence. Chi-square/Fisher's exact tests assessed associations with categorical risk factors. Linear regression was used to evaluate continuous predictors of admission temperature.

Results:
231 infants were included. Mean birth weight was 2,289.7 ± 833.9 g, and mean admission temperature was 36.624 ± 0.520°C. Hypothermia occurred in 30.3% (70/231), with 53 infants classified as mildly hypothermic (36.0–36.4°C) and 17 as moderately hypothermic (32.0–35.9°C). Preterm birth ($p = 0.042$) and low birth weight ($p < 0.001$) were significantly associated with hypothermia. No significant associations were found with mode or place of delivery, resuscitator's professional level, or time of birth. Linear regression showed birth weight significantly predicted admission temperature ($\beta = 0.277$; $p < 0.001$); time of birth did not ($\beta = –0.020$; $p = 0.758$). The use of additional thermal protection (head caps, plastic wraps) did not significantly reduce hypothermia among preterm infants.

Conclusion:
Hypothermia on NICU admission remains prevalent, particularly in preterm and low birth weight neonates. Birth weight significantly influenced admission temperature, highlighting this group's vulnerability. Despite the use of standardized thermal protection practices, hypothermia persists, suggesting that current measures may be insufficient and require reinforcement or further enhancement to ensure effective thermal care during the immediate postnatal period.

Keywords:

hypothermia, neonatal, risk factors

Abstract ID: A-0088

Status:	Format of Presentation:	Abstract Category:	Format of Study:
Accepted	Poster	Neonatal	Case Report

Abstract Title:

Femoral Facial Syndrome in a Neonate of a Diabetic Mother: A Case Report

Authors & Institutions:

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Abstract Text:

Introduction:
Femoral Facial Syndrome (FFS) is a rare congenital disorder characterized by femoral hypoplasia and distinctive craniofacial anomalies. The condition is typically sporadic, with approximately one-third of cases associated with maternal diabetes. Early diagnosis and multidisciplinary care are crucial for optimizing outcomes.

Case Description:
We report a term neonate born to a mother with poorly controlled pregestational diabetes, presenting with multiple congenital anomalies at birth. Clinical examination revealed bilateral femoral hypoplasia, cleft palate, micrognathia, vertebral anomalies, talipes equinovarus, and microtia. The infant also exhibited upslanting palpebral fissures and short limbs. Karyotype analysis was normal. Based on the constellation of clinical features and the maternal history, a diagnosis of FFS was made.
Multidisciplinary referrals were initiated: plastic surgery for cleft palate repair, orthopaedics for lower limb deformities, and developmental teams for early intervention. Given the lumbosacral abnormalities, bowel and bladder function will be monitored to assess for neurogenic dysfunction. Genetic counseling was provided, emphasizing the importance of preconception glycaemic control, particularly during the organogenesis period in early gestation.

Discussion:
FFS is an exceedingly rare condition, with fewer than 70 cases reported in the literature as of 2021. The incidence is estimated at approximately 0.11 to 0.2 per 10,000 births. Prognosis varies depending on the severity of associated anomalies. While some cases result in perinatal mortality, others survive into adulthood, as evidenced by the first reported adult case of FFS. This case underscores the importance of early recognition, comprehensive management, and the potential for favourable outcomes with appropriate care.

Keywords:

femoral facial syndrome, diabetes

Abstract ID: A-0089

Status:	Format of Presentation:	Abstract Category:	Format of Study:
Short-listed for Best Poster	Poster	Neonatal	Research Study

Abstract Title:

Unveiling the Surge: Culture-Proven Bacterial Conjunctivitis in a Tertiary Centre's Neonatal Intensive Care Unit

Authors & Institutions:

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Abstract Text:

Purpose:
To determine the epidemiology and prevalence of ophthalmia neonatorum (ON), and to identify its causative organisms along with their antibiotic susceptibility patterns.

Methods:
A retrospective study of neonates with culture-proven conjunctivitis from January 2023 to December 2024 was conducted. Clinical data, gram stain results, and antibiotic susceptibility were analyzed using t-tests, chi-square, and logistic regression.

Results:
Among 76 neonates with culture-proven conjunctivitis, 71.1% had Gram-negative infections, while 28.9% were Gram-positive. Gram-positive infections were diagnosed later than Gram-negative ones (mean age 27.2 vs. 17.8 days, p = 0.049), though no significant differences were found in other variables. Antibiotic resistance was significantly higher among Gram-negative organisms, with resistant infections presenting at an earlier age (mean 14.6 vs. 25.8 days, p = 0.010). However, resistance was not significantly associated with any categorical clinical variables, including ethnicity, gestational age, birth weight, delivery mode, Apgar score, maternal risk of sepsis, respiratory support, bed occupancy rate or timing of eye examination.

Conclusion
In conclusion, Gram-negative bacterial conjunctivitis was more prevalent than Gram-positive infections in neonates and was associated with earlier presentation and a higher rate of antibiotic resistance. However, resistance was not significantly associated with clinical variables. These findings highlight the importance of targeted surveillance and judicious antibiotic use in managing neonatal conjunctivitis.

Keywords:

Ophthalmia Neonatorum, epidemiology, antibiotic resistance, prevalence, incidence

Abstract ID: A-0090

Status:	Format of Presentation:	Abstract Category:	Format of Study:
Accepted	Poster	Neonatal	Research Study

Abstract Title:

Increase of Bed Occupancy Rate at District Hospital After Implementation of Shuttle Jaundice Service

Authors & Institutions:

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Abstract Text:

Background:
In many healthcare systems, neonatal jaundice is a common condition that often results in referral to tertiary hospitals. This practice can lead to underutilization of district hospital resources and increased pressure on higher-level facilities. Prior to intervention, our district hospital showed a consistently low Bed Occupancy Rate (BOR) for neonatal care.

Objective: To evaluate the impact of implementing shuttle jaundice services on BOR in a district hospital and its effect on workload distribution across the healthcare system

Methods: A retrospective analysis was conducted using admission data of neonates from 2022 to 2024. The shuttle jaundice service, which allows neonates with jaundice to receive phototherapy and monitoring at the district level, was introduced during this period. BOR was calculated annually to assess trends before and after the service implementation.

Results: The introduction of the shuttle jaundice service led to a notable increase in the district hospital's BOR for neonatal cases. The hospital successfully managed more cases locally, reducing unnecessary referrals to tertiary hospitals. This shift not only optimized the use of district-level resources but also alleviated some of the caseload burden on tertiary care centers

Conclusion: The shuttle jaundice service proved to be an effective strategy to increase BOR in district hospitals. By managing neonatal jaundice cases closer to the community, the service improved the operational efficiency of district hospitals and contributed to reducing the workload of tertiary institutions. These findings highlight the potential benefits of decentralizing specific clinical services to strengthen the healthcare delivery network.

Keywords:

Jaundice, bed occupancy rate

Abstract ID: A-0091

Status:	Format of Presentation:	Abstract Category:	Format of Study:
Accepted	Poster	Neonatal	Case Report

Abstract Title:

Severe Neonatal Anaemia Secondary to Fetomaternal Haemorrhage: A Case Report

Authors & Institutions:

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Abstract Text:

Background:
Fetomaternal Haemorrhage (FMH) refers to the transfer of foetal blood into the maternal circulation due to a disruption in the placental barrier. This condition is associated with significant foetal morbidity and mortality. In cases of massive FMH, severe foetal anaemia can occur, adversely affecting both foetal and neonatal outcomes. Haemoglobin (Hb) levels are a critical prognostic indicator, with values below 5.0 g/dL strongly associated with poor outcomes and increased risk of foetal death.

Case Study:
We report a case of a term newborn who was born with marked clinical pallor and required immediate intubation at birth due to poor respiratory effort. Notably, there were no significant antenatal or intrapartum complications. The initial complete blood count (CBC) revealed severe anaemia with a Hb level of 3.4 g/dL and a haematocrit (HCT) below 15%, accompanied by metabolic acidosis on blood gas analysis. A Kleihauer test was performed and returned positive, with an estimated 202 mL of foetal red cells identified in the maternal circulation, confirming the diagnosis of FMH. The infant was managed with two successive transfusions of packed red blood cells at 15 mL/kg per cycle. Following treatment, the baby was successfully extubated and discharged in stable condition on day 6 of life, with scheduled follow-up.

Conclusion:
Massive FMH can cause severe neonatal anaemia, negatively impact neonatal outcomes, and significantly increase the risk of mortality. Prompt recognition of FMH as the cause of neonatal anaemia, especially during resuscitation, is critical for initiating timely interventions and improving the outcomes and survival rates.

Keywords:

Fetomaternal haemorrhage, foetal anaemia, Kleihauer test, haemoglobin, foetal red cells.

Abstract ID: A-0092

Status:	Format of Presentation:	Abstract Category:	Format of Study:
Accepted	Poster	Neonatal	Case Report

Abstract Title:

Campomelic Dysplasia - A Rare Form of Skeletal Dysplasia

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Abstract Text:

Background:
Campomelic Dysplasia is a rare and severe congenital skeletal disorder that primarily affects the development of bones and cartilage.

Case Report:
We report a term infant born via spontaneous vaginal delivery who was admitted to our NICU. Antenatally, skeletal dysplasia was suspected based on detailed ultrasound findings of short femurs, though no other significant abnormalities were noted.
Postnatally, clinical and radiological features consistent with campomelic dysplasia were observed, including micrognathia, ambiguous genitalia, hypoplastic scapulae, presence of eleven pairs of ribs, bowed femurs and tibias, hypoplastic cervical vertebrae, vertical narrow ilia, and hypoplastic thoracic vertebral pedicles. The case was reviewed in consultation with a geneticist and radiologist for further evaluation and confirmation.
Campomelic dysplasia often results in severe respiratory insufficiency in the neonatal period due to tracheobronchomalacia and hypoplasia of the thoracic cage. In this case, the infant was discharged home on non-invasive ventilation but unfortunately succumbed to severe respiratory failure at three months of age.

Discussion:
Campomelic dysplasia is caused by mutations in the SOX9 gene. While most cases are sporadic, inheritance in an autosomal dominant pattern has also been described. Management is supportive, and prognosis remains poor, with most affected infants not surviving beyond the first year of life.

Keywords:

campomelic dysplasia, genetic disorder, skeletal dysplasia

Abstract ID: A-0093

Status:	Format of Presentation:	Abstract Category:	Format of Study:
Accepted	Poster	Neonatal	Case Report

Abstract Title:

Not Just the Usual Community Acquired Pneumonia: Congenital Tuberculosis

Authors & Institutions:

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Abstract Text:

Background:
Tuberculosis (TB) remains a major global infectious disease. Congenital TB (cTB), though rare, carries a high mortality rate of up to 50%. Diagnosis is often delayed, especially when mothers are asymptomatic, leading to late treatment and rapid disease progression. Early recognition and intervention are critical. In Malaysia and the Southeast Asian region, data on cTB is lacking; hence, we report this case to raise awareness.

Case Description:
An ex-premature 34 weeker, Malay, infant boy was admitted at 2 months old with respiratory distress following 2-weeks of cough and fever. His condition rapidly declined necessitating intubation and mechanical ventilation. Despite broad-spectrum antibiotics and high ventilator settings, his condition worsened. No pathogen was detected from tracheal aspirate respiratory multiplex panel and culture. Chest radiographs revealed progressive lungs consolidation with cavitations. Abdominal ultrasonography showed multiple splenic micro-abscesses.

One month into admission, the infant's mother had a sudden death after having symptoms of cough and lethargy two weeks prior. Post-mortem revealed changes consistent with TB infection in her lungs, brain and uterus. The infant was subsequently tested and found positive for TB. Given his primary pulmonary symptoms, splenic involvement, and maternal genital TB, a diagnosis of congenital TB was made. Anti-TB therapy was initiated. Unfortunately, the infant developed TB-related immune reconstitution inflammatory syndrome and succumbed to the illness.

Conclusion:
Congenital tuberculosis, although rare, is associated with high mortality. In countries like Malaysia with intermediate TB burden, clinician should consider cTB in infants with severe pneumonia unresponsive to conventional treatment. As maternal symptoms may be absent or mild, detailed maternal history is crucial. This case highlights the importance of early detection and awareness of cTB to improve clinical outcomes.

Keywords:

congenital tuberculosis, maternal genital TB

Abstract ID: A-0094

Status:	Format of Presentation:	Abstract Category:	Format of Study:
Accepted	Poster	Neonatal	Case Report

Abstract Title:

Clinical Features and Outcomes of Neonatal *Listeria monocytogenes* Sepsis: A Case Series

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Abstract Text:

Background:
Listeria monocytogenes is a rare but serious foodborne pathogen that can be transmitted vertically from mother to foetus and is a significant cause of neonatal sepsis and meningitis, with a global mortality rate of up to 20–30%. This case series aims to describe the clinical features, management, and outcomes of neonates with culture-confirmed *Listeria monocytogenes* sepsis to guide clinical practice.

Case Series:
A retrospective review was conducted on six neonates with blood culture-confirmed listeriosis admitted to Hospital Melaka between 2022 and January 2025. Data collected included birth history, clinical features, microbiological results, antibiotic regimens, laboratory parameters, and outcomes.

Six neonates had positive blood culture for Listeria monocytogenes and elevated C-reactive protein. Four were delivered via emergency lower segment caesarean section – three due to foetal distress and two via spontaneous vaginal delivery. One neonate was born at term; the remaining five were preterm, with gestational ages ranging from 25 to 35 weeks. Meconium-stained liquor was observed in three preterm deliveries. Intravenous antibiotics were administered for durations ranging from 14 to 21 days. Although cerebrospinal fluid (CSF) cultures were negative, biochemical findings were suggestive of meningitis, with elevated protein and decreased glucose levels observed in four cases but one case had normal CSF glucose. One preterm at 25 weeks of gestation succumbed on day seven of life despite treatment. The remaining five neonates were discharged without apparent neurological sequelae.

Conclusion:
Neonatal *Listeria monocytogenes* sepsis, while responsive to appropriate antimicrobial therapy, carries significant mortality risk in extremely preterm infants. In this series, meconium-stained amniotic fluid and foetal distress emerged as potential risk factors. Further studies are needed to explore preventive strategies, such as maternal screening, and to assess long-term neurodevelopmental outcomes in survivors.

Keywords:

Listeriosis

Abstract ID: A-0095

Status:	Format of Presentation:	Abstract Category:	Format of Study:
Accepted	Poster	Neonatal	Case Report

Abstract Title:

A Novel Coexistence of Chromosome 1q43q44 Deletion and 10p15.3p14 Duplication in a Neonate: A Case Report

Authors & Institutions:

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Abstract Text:

Background:
The microdeletion of 1q43q44 is a recognised condition characterised by intellectual disability, speech delay, seizures, microcephaly, corpus callosum abnormalities, and distinctive facial features. Approximately more than 150 patients were reported so far and usually it is described as sole cytogenetic abnormalities. Although co-occurrence with other chromosomal abnormalities has occasionally been described, to the best of the authors' knowledge, the coexistence of a 1q43q44 deletion with a 10p15.3p14 duplication in a neonate has not been previously reported.

Case Report:
We present a case of a term female infant who was noted dysmorphic at birth associated with global developmental delay, corpus callosum dysgenesis, laryngomalacia and gastroesophageal reflux disease. The dysmorphic features were microcephaly, down-turned mouth, thin lips, wide anterior fontanelle, thin hair, low hairline, webbed neck, small chin, high arched palate, wide spaced nipples and right inguinal hernia. She appears older compared to peers with wrinkles over face. Her laryngomalacia was treated with supraglottoplasty and gastrostomy along with infusion feeding. Her conventional karyotyping was normal, 46 XX. Chromosomal microarray analysis (CMA) was carried out and revealed coexistence of 1q43q44 deletion with 10p15.3p14 duplication.

Conclusion:
Coexistence of 1q43q44 deletion with 10p15.3p14 duplication is considered novel. The opportunity to highlight this case report allows clinician to be more vigilant of the importance of CMA and its clinical utility especially in diagnosing dysmorphic child. The use of CMA allows delineation of the presence of submicroscopic deletion or duplication such as what was found from this case, its size, genotype/phenotype correlation and further clinical management and genetic counselling.

Keywords:

1q43q44 deletion, 10p15.3p14 duplication, chromosomal microarray analysis (CMA)

Abstract ID: A-0096

Status:	Format of Presentation:	Abstract Category:	Format of Study:
Accepted	Poster	Neonatal	Case Report

Abstract Title:

Silent to Critical: Complex Congenital Pulmonary Malformation Presenting with Bilateral Chylothorax in a Neonate

Authors & Institutions:

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Abstract Text:

Background:
Complex Congenital Pulmonary Malformation represents an uncommon spectrum of lung anomalies that can manifest from prenatal life through childhood, and rarely into adulthood. These congenital lung anomalies encompass diverse conditions ranging from clinically silent, incidentally detected lesions to those presenting with characteristic clinical and radiological features in the neonatal period. Several of these anomalies carry significant clinical implications and may result in fatal outcomes without prompt diagnosis and appropriate management.

Case Report:
A 3.4 kg term male infant was delivered via emergency caesarean section at 39 weeks due to breech presentation and oligohydramnios. He was born vigorous with good Apgar scores. He developed respiratory distress at 5 minutes of life, necessitating NICU admission for high-flow nasal cannula (HFNC) support. His respiratory status deteriorated at 20 hours of life, requiring escalation to non-invasive positive pressure ventilation (NIPPV) and subsequent intubation at 24 hours with initial management for congenital pneumonia.
After a period of improvement, he deteriorated again on day 9, requiring re-intubation with conventional ventilation. Chest imaging revealed a possible left lung anomaly, leading to contrast-enhanced CT (CECT) of the thorax on day 10, which demonstrated left-sided bronchopulmonary sequestration (BPS), bilateral pulmonary hypoplasia, and absent segmental bronchus. By day 12, frequent desaturations necessitated transition to high-frequency oscillatory ventilation (HFOV). A repeat chest X-ray revealed bilateral pleural effusions requiring chest drain insertion, with subsequent pleural fluid analysis confirming bilateral chylothorax.

Conclusion:
Complex congenital pulmonary malformation complicated by bilateral chylothorax presents a significant diagnostic and management challenge in neonates. The accumulation of chyle in the pleural space further compromises already abnormal lung development and ventilation, creating a complex clinical scenario requiring multidisciplinary expertise. This case highlights the importance of comprehensive imaging evaluation in neonates with persistent, unexplained respiratory distress to identify rare pulmonary malformations and their potentially life-threatening complications.

Keywords:

complex congenital pulmonary malformation

Abstract ID: A-0097

Status:	Format of Presentation:	Abstract Category:	Format of Study:
Accepted	Poster	Neonatal	Case Report

Abstract Title:

A Twin Within: Fetus-in-Fetu Masquerading as a Suprarenal Mass in a Neonate.

Authors & Institutions:

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Abstract Text:

Background:
Fetus-in-fetu (FIF) is a rare congenital anomaly, often presenting as a retroperitoneal mass in neonates. It can be mistaken for more common pathologies such as neuroblastoma, nephroblastoma or teratoma on imaging, making preoperative diagnosis challenging.

Case Presentation:
We report the case of a male neonate, born at term via emergency caesarean section for foetal distress. Antenatal ultrasound showed right renal cyst. He presented on day 10 of life with poor feeding, cyanosis, and apnoeic episode. Examination revealed abdominal distension and mass.
He was critically ill with signs of septic shock, including hypotension, hypoglycaemia, hyperkalaemia, metabolic acidosis, and acute kidney injury. He required mechanical ventilation for three days and covered empirically with broad spectrum antibiotic due to persistent fever. Cultures were negative and inflammatory markers remained low.
Initial ultrasound and Computed Tomography abdomen revealed a large heterogeneous suprarenal mass with cystic components, calcifications, and mass effect, raising concern for neuroblastoma or nephroblastoma.
He subsequently developed systemic hypertension probably due to retroperitoneal mass effect which effectively managed with oral nifedipine. After stabilization, he underwent exploratory laparotomy on day 23 of life.
Intraoperatively, the mass was located between the right kidney and adrenal gland, displacing both structures but sparing them. It had external skin-like covering, a sac-like structure resembling an umbilical cord, limb buds, and rudimentary tissue consistent with neural tube elements.

Conclusion:
Fetus-in-fetu, though rare, should be considered in neonates with complex retroperitoneal masses. Early multidisciplinary assessment and timely surgical intervention are key to preventing serious complications and ensuring favourable outcomes

Keywords:

Fetus-in-fetu

Abstract ID: A-0098

Status:	Format of Presentation:	Abstract Category:	Format of Study:
Short-listed for Best Oral	Oral	Neonatal	Research Study

Abstract Title:

The Association between Antenatal Care and Neonatal Outcomes of Infants Born to Single Unwed Mothers at a Tertiary Care Centre: a Six Year Review

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Abstract Text:

Background:
Single unwed mothers are known to be disproportionately affected by adverse health, poverty, financial hardship, and social stigma. This may affect the quality of their antenatal care and hence the neonatal outcomes, highlighting a critical public health concern.

Objectives:
This study aims to explore the characteristics of single unwed mothers and their infants who received antenatal care at UMMC, and, to examine the relationship between the antenatal care received with neonatal outcomes.

Methods:
A retrospective cohort study was conducted on single unwed mothers who gave birth at UMMC between 1st January 2017 and 31st December 2022. Information on maternal sociodemographic characteristics, medical conditions, and antenatal care was obtained from electronic medical records. The association between antenatal care and adverse neonatal outcomes was then analyzed using binary logistic regression.

Results:
This study involved 280 single unwed mothers aged 15–42, mostly Malay and first-time mothers. One-third had no antenatal care (ANC), and over half of those who did, had fewer than four visits. Only 30.7% met WHO's minimum for adequate ANC, i.e. a minimum of 4 antenatal visits and timely first visit at less than 16 weeks. Preterm birth rate was high at 26.3%, more than double the national average. Unsatisfactory ANC was significantly associated with low gestational age ($p = 0.003$), low birth weight ($p = 0.025$), neonatal sepsis ($p < 0.001$), and respiratory distress syndrome ($p = 0.045$). Single unwed mothers who received unsatisfactory ANC were more than twice likely to experience preterm birth or a low-birth-weight baby.

Conclusion:
In our study, single unwed mothers received unsatisfactory antenatal care, which was strongly associated with neonatal complications, including low gestational age, low birth weight, sepsis, and prematurity-related conditions. Comprehensive antenatal care and improved maternal support are essential for better neonatal outcomes and long-term benefits for both mothers and infants.

Keywords:

Unmarried mothers, premarital pregnancy, antenatal care, prenatal care, neonatal, neonatal mortality

Abstract ID: A-0099

Status:	Format of Presentation:	Abstract Category:	Format of Study:
Accepted	Poster	Neonatal	Case Report

Abstract Title:

Necrotising Enterocolitis in a Late Preterm Infant Following Early-Onset ESBL Escherichia coli Sepsis: A Case for Vigilance in Vertical Transmission

Authors & Institutions:

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Abstract Text:

Background:
Early-onset neonatal sepsis (EOS) is commonly associated with *Group B Streptococcus* (GBS), but extended-spectrum beta-lactamase (ESBL)-producing *Escherichia coli* (*E.coli*) is increasingly implicated. A recent study from Selangor reported a 20% colonisation rate of ESBL *E. coli* among healthy pregnant women, suggesting potential vertical transmission even in low-risk pregnancies.

Case Presentation:
We describe a newborn born at 35weeks 6 days with birth weight 2.92 kg via spontaneous vaginal delivery with good Apgar scores of 9 and 10 at 1 and 5 minutes. Initially well, he developed abdominal distension and signs of sepsis at 25 hours of life. Blood cultures grew ESBL *E. coli* within 24 hours, indicating probable vertical transmission. Empirical antibiotics were escalated to IV Meropenem after blood culture confirmed ESBL *E. coli*. Despite early therapy, he progressed to NEC and meningitis. Imaging showed pneumatosis intestinalis, and CSF culture confirmed meningitis. He underwent laparotomy at Day 30 of life revealed a 4 cm sigmoid stricture consistent with post-NEC changes. Surgical resection and primary anastomosis were performed. He achieved full feeds subsequently and was discharged well.

Discussion:
This case demonstrates complications arise from ESBL *E. coli* early onset sepsis, even in a late preterm infant who appeared well at birth. While routine ESBL screening in pregnancy is not standard practice, such organisms are sometimes detected through high vaginal swabs or during GBS screening. This underlines the importance of interpreting maternal microbiology results comprehensively. Clinicians should be alert to ESBL *E. coli* as an emerging cause of early onset sepsis. Timely recognition and appropriate antibiotic coverage are crucial to prevent complications. Awareness of potential maternal colonisation and timely antibiotic escalation could improve neonatal outcomes.

Keywords:

Early-onset neonatal sepsis (EOS)

Abstract ID: A-0100

Status:	Format of Presentation:	Abstract Category:	Format of Study:
Accepted	Poster	Neonatal	Case Report

Abstract Title:

Cor Triatriatum Dexter: A Rare Cause of Persistent Cyanosis in The Newborn.

Authors & Institutions:

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Abstract Text:

Introduction:
Cor triatriatum dexter (CTD) is a rare cause of cyanotic heart disorder in neonate. We report a successful management of CTD.

Case Report:
A 39-week gestation newborn with birth weight of 3045g who required NpO2 upon admission to special care nursery (SCN) for congenital pneumonia, turned cyanosed at 12 hours of life and required intubation for persistent cyanosis with oxygen saturation between 80-84% on 100% oxygen. Echocardiography confirmed the diagnosis of CTD and large PDA. She had the CTD membrane resected via an uncomplicated open-heart surgery at day 37 of life.

Discussion:
CTD is an extremely rare congenital heart defect in which a persistence embryonic right sinus venosus valve divides the right atrium (RA) into smooth and trabeculated chamber. Clinical manifestation varies depending of the degree of partitioning of RA and amount of blood flow across the membrane. Surgical resection of CTD is the treatment of choice with usually excellent short and long-term outcomes

Conclusion:
We report this case to highlight CTD as a rare cause of central cyanosis in newborn. Diagnosis can be made by a detail and comprehensive echocardiography with a high index of suspicion.

Keywords:

Cor Triatriatum Dexter, CTD

Abstract ID: A-0101

Status:	Format of Presentation:	Abstract Category:	Format of Study:
Accepted	Poster	Nursing	Case Report

Abstract Title:

Hypoglycemia in Neonates Related to Maternal Obesity: A Two-Case Clinical Insight

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Abstract Text:

Introduction:
Neonatal hypoglycaemia remains a common metabolic disturbance with significant implications for neurodevelopment, particularly in the immediate postnatal period. Several studies have shown that Maternal Obesity is significantly associated with increased risk of neonatal hypoglycaemia in the presence of other potential risk factors such as Gestational Diabetes, Macrosomia baby, even Caesarean baby. This statement shows that, hypoglycaemia in the early neonatal period not only happens in mother with gestational diabetes during pregnancy, but also to non- diabetic mother. The potential link between maternal obesity and neonatal hypoglycemia warrants focused clinical examination to better inform perinatal care.

Case Description:
Two cases observed in early 2025 were analyzed:

Case 1: A full-term neonate (38+4 weeks) born to a non-diabetic, obese mother (BMI 31) presented with asymptomatic hypoglycaemia. Baby birth weight is 3.45 kg. Initially baby was with mom, but less than 24 hours of age, baby developed hypoglycaemia with dextrostox (DXT) of 2.0 mmol/L. Immediate intervention done. The baby received intravenous fluids and orogastric tube (OGT) feeding. Gradual glycaemic improvement occurred with sustained oral feeding. The infant was discharged after 6 days with normal glucose levels.

Case 2: A late preterm neonate (37 weeks) born to an obese mother (BMI 31.7) with gestational diabetes mellitus (on insulin) and chronic hypertension. Delivery occurred via elective lower segment Caesarean section (LSCS) due to intrauterine growth restriction (IUGR). The neonate was classified as an infant of a diabetic mother (IDM). Baby birth weight is 2.07 kg. Initial DXT was 3.3 mmol/L. The neonate was started on IV fluids and top-up feeds via OGT. Glucose levels remained stable, and the baby transitioned to full feeds without complications. Discharged after 4 days.

Data collected included gestational age, birth weight, maternal history, initial and follow-up glucose readings (via blood glucose monitoring machine), and feeding practices. Both neonates were closely monitored and managed per hospital protocol for hypoglycaemia.

Discussion
Both cases illustrate different presentations of neonatal hypoglycaemia in the context of maternal obesity. The presence of maternal obesity alone may predispose to neonatal hypoglycaemia, while additional maternal comorbidities such as GDM and hypertension appear to influence neonatal birth weight and glucose stability. Early detection, supportive feeding, and glucose monitoring were key to favourable outcomes. These findings emphasize the importance of targeted surveillance for neonates born to obese mothers, regardless of maternal diabetic status.

Keywords:

neonatal hypoglycemia, maternal obesity, gestational diabetes mellitus, infant of diabetic mother

Abstract ID: A-0102

Status:	Format of Presentation:	Abstract Category:	Format of Study:
Shortlisted for Best Poster	Poster	Obstetric	Research Study

Abstract Title:

Risk Factors Contributing to Clavicular Fracture and Brachial Plexus Injury Among Term Neonates in a Tertiary Centre: A 3-Year Retrospective Audit

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Abstract Text:

Introduction:
Neonatal clavicle fractures and brachial plexus injuries, though often self-limiting, can cause significant parental anxiety and may necessitate prolonged paediatric follow-up. Identifying risk factors is crucial to guide preventive strategies and optimise intrapartum care.

Objectives: To evaluate the incidence and associated risk factors of neonatal clavicular fractures and brachial plexus injuries from 2022 to 2024 in a tertiary Malaysian hospital,in this study in Hospital Tengku Ampuan Afzan (Referring centre from whole Pahang)

Methods: This retrospective audit reviewed all term singleton vaginal and caesarean deliveries from January 2022 to December 2024. Data were extracted from delivery notes, paediatric records, and radiologic findings. Risk factors assessed included maternal BMI, diabetes status, mode of delivery, labour progression, and neonatal birthweight.
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Results: Out of 18,149 term singleton deliveries, 10 neonates had clavicle fractures (0.055/1000), 8 had brachial plexus injuries (0.44/1000), with 6 overlapping cases. Precipitated labour was the most common contributing factor (83% for clavicle fractures, 87.5% for brachial plexus injuries). Maternal obesity (BMI >30) and diabetes were significantly associated with brachial plexus injuries (75% and 25%, respectively), while instrumental deliveries were more linked to clavicle fractures (40%). Macrosomia was absent; most affected neonates weighed 3–4 kg.

Conclusions:
Rapid labour progression emerged as the leading modifiable risk factor for both injuries. Contrary to traditional assumptions, average-weight neonates and non-macrosomic deliveries were significantly affected. Early antenatal risk stratification, cautious use of instrumental delivery, and preparedness for shoulder dystocia are essential preventive strategies. Prognosis remains excellent with appropriate early management and follow-up.

Keywords:

Clavixular fractures, newborn

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